

RURAL IMPROVEMENT

FRANK A. WAUGH

ALBERT R. MANN LIBRARY
CORNELL UNIVERSITY



CORNELL UNIVERSITY LIBRARY



3 1924 050 552 375



Cornell University
Library

The original of this book is in
the Cornell University Library.

There are no known copyright restrictions in
the United States on the use of the text.

RURAL
IMPROVEMENT

Other Books by the Same Author

Landscape Gardening

Plums and Plum Culture

Fruit Harvesting, Storing, Marketing

Systematic Pomology

Dwarf Fruit Trees

The American Apple Orchard

The Landscape Beautiful

Beginner's Guide to Fruit Growing

The American Peach Orchard



A NEW ENGLAND COUNTRY VILLAGE.

RURAL IMPROVEMENT

*The Principles of Civic Art Applied to Rural
Conditions, including Village Improve-
ment and the Betterment of
the Open Country*

By
FRANK A. WAUGH

ILLUSTRATED

NEW YORK
ORANGE JUDD COMPANY

LONDON
KEGAN PAUL, TRENCH, TRÜBNER & CO., Limited
1914

Copyright, 1914, by
ORANGE JUDD COMPANY
All Rights Reserved

ENTERED AT STATIONERS' HALL
LONDON, ENGLAND

Printed in U. S. A.

Inscribed to
J. Horace McFarland
President of the
American Civic Association

Ardent and Effective Advocate of a Country
Clean, Beautiful and Convenient

PREFACE

BIG issues are stirring in the rural districts of America. The farming communities, and the small towns dependent on them, have reached a stage of genuine and confident prosperity. It is no longer a question with them whether they can live through the winter and pay the interest on the mortgage. The main problem is not now how to make more money, but how to live more comfortably. The way the farmers spend money for automobiles proves this.

Better homes and better home surroundings are the matters of prime concern. Better schools, better playgrounds, better churches, better libraries, better roads, are wanted—better cemeteries, even. In the main, these are community problems, to be solved by the co-operative action of the whole neighborhood. Co-operation has been talked of as the coming remedy for all the farmer's difficulties; but the word has

PREFACE

been given too narrow a meaning and application. The neighborhood can accomplish more by co-operating to own a grange hall, or the boys can do better co-operating to maintain a baseball league, than the farmers can co-operating to buy fertilizer twenty-five cents under market price. And the best place to learn how to co-operate is in the care of public property, such as parks, commons, playgrounds, schools and roads which we own in common.

The country needs to be improved. Some of us who live in the country and love it hate to admit this. But the steady stream of young folks—and some older ones—moving toward the city shows that most people still find the city more attractive than the country. Look what has been done for the city! Fine schools, theaters, picture shows, playgrounds, parks, music, boulevards—play, beauty and entertainment. The simple fact is that the country must do something to offset these attractions or the exodus of live young men and women will go on forever.

Better farming—bigger crops and better prices—will do something. Better houses and household equipment will do more. Better neighborhood equipment for recreation and wholesome social intercourse will do still more. There must be improvement all along the line. This is the Rural Improvement which I would preach.

At the same time I would point out that any improvement of this sort can best begin on its physical side. The concrete problems of physical property are easier to grasp; and if it is true, as it partly is, that a man must have a sound body in order to support a vigorous mind and a healthy conscience, it is more truly true that a community must be clean and orderly physically in order to be clean and orderly socially and morally. One of the strongest elements in general agricultural improvement is to be found in the contribution offered by civic art—the art which builds a sound physical frame for the support of a healthy community life. To this great cause I offer my small contribution.

FRANK A. WAUGH.

AMHERST, MASS., July, 1914.

TABLE OF CONTENTS

CHAPTER	PAGE
1. DEFINITIONS AND PRINCIPLES-----	2
2. MEANS OF ACCESS-----	19
3. ROADS AND STREETS-----	32
4. ROADSIDE TREES -----	58
5. CIVIC CENTERS -----	83
6. PUBLIC GROUNDS-----	103
7. THE VILLAGE HOME GARDEN-----	120
8. FARM PLANNING -----	137
9. COMMUNITY PLANNING -----	160
10. RURAL ARCHITECTURE -----	181
11. INCIDENTAL PROBLEMS -----	205
12. IMPROVEMENT PROGRAMS -----	224
13. ORGANIZATION AND MANAGEMENT-----	245

Country and city are united in an indissoluble partnership, which is equitable and for their mutual profit.

WILBERT L. ANDERSON,

"The Country Town."

The provision of this [civic] ideal . . . will have other value than merely that of popular education. It will offer inspiration. Nor will this inspiration be material only, but as clearly moral and political and intellectual. The pride that enables a man to proclaim himself "a citizen of no mean city" awakens in his heart high desires that had before been dormant.

CHARLES MULFORD ROBINSON,

"Modern Civic Art."

To the multitude are carried some of the fruits of prosperity, leisure and culture; from them are gained democracy, fraternity, freedom of social expression; with them is developed a new dynamic force capable of remaking the American community by inspiring the American citizen with the new civic spirit.

CHARLES ZUEBLIN,

"A Decade of Civic Development."

CHAPTER I

DEFINITIONS AND PRINCIPLES

ART in general has no very high reputation in America. It is thought to be not sufficiently "practical." Yet at present this mistaken view is giving way to a better understanding. In the first place people are beginning to see that anything is none the less useful for being beautiful. A beautiful bridge will carry just as big a load as an ugly one. A beautiful and dignified house is just as comfortable as a wretched plain one. A well-proportioned silo will keep the silage just as sweet as an ugly unpainted one with the top off. Beauty does not interfere with utility, nor utility with beauty. The two are sisters. They should walk hand in hand. Nothing can be truly beautiful unless it is perfectly suited to its proper use; and, conversely, nothing can perfectly serve its highest uses unless it is beautiful.

DEFINITIONS AND PRINCIPLES

Thus we are awakening in this country (to put the whole meaning into one phrase) to *the necessity of having things done right*. A barn is not strictly right until it serves its native purposes to the fullest possible measure—and when this full and high and overflowing stage of utility is reached, the barn must be also beautiful.

Now in public affairs (which we may call also civic affairs or community affairs) we reach this conclusion a trifle later. We sooner see that our own houses and silos must be right than we realize that the public schoolhouses, roads and cemeteries come under the same high necessity. But this second stage has been fully reached in many American communities, and the need is keenly felt of realizing in all public works the highest utility combined with the utmost beauty. And this conclusion may almost be adopted as the definition of art—to realize the maximum of utility combined with the maximum of beauty. When thus rightly understood, art becomes an indispensable factor in daily life—whether private or pub-

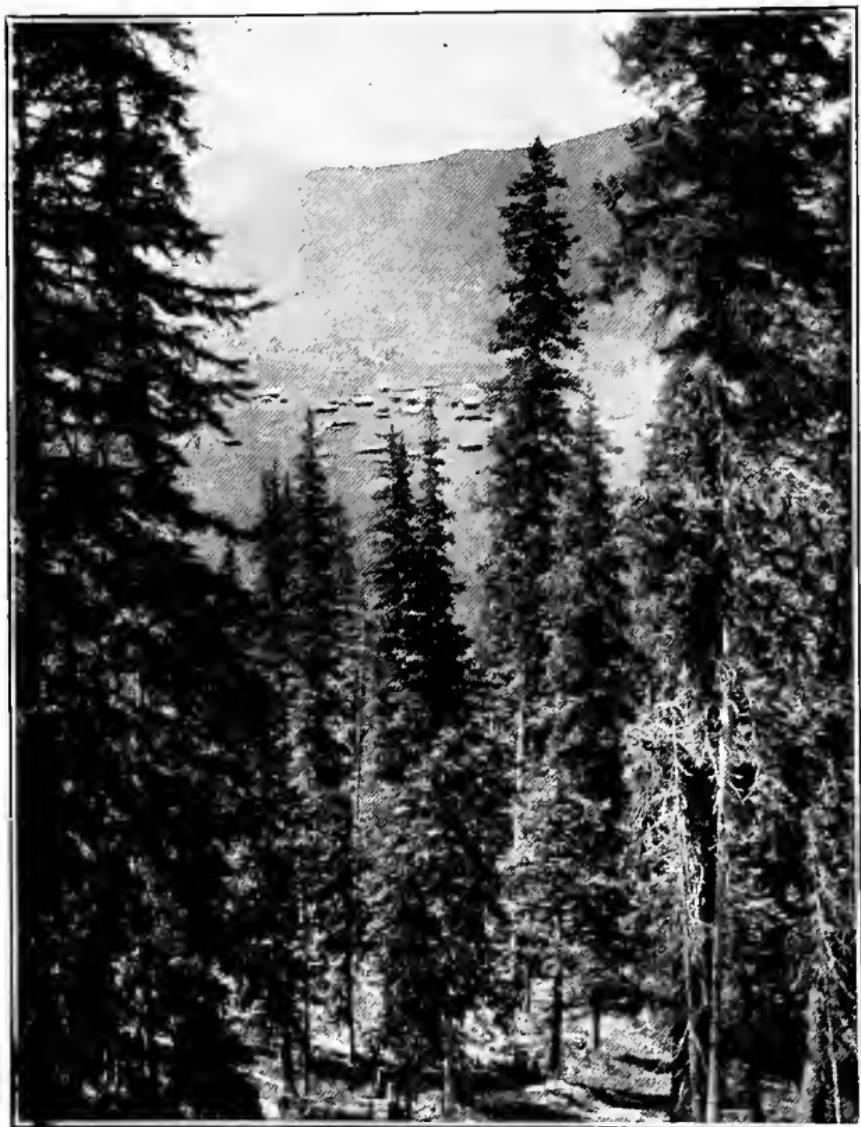
RURAL IMPROVEMENT

lic life—and not a mere superfluity fit for the attention only of dudes, decadents and highbrows.

Civic art, therefore, may be defined as the practice of *doings things right* with reference to all public works—or to state it more explicitly, it is the constant endeavor to secure in all public works the maximum of utility combined with the maximum of beauty.

Civic art thus becomes a branch of landscape architecture, which endeavors to secure for all the outdoor needs of humanity the greatest convenience plus the utmost order and beauty. The principles of civic art, then, are the same as those of landscape architecture, and this great art must be chiefly appealed to to supply both the principles and the detailed practices for application in the newer branch of civic art.

It would lead us too far afield from our present studies should we attempt here to elucidate all the basic principles of landscape architecture and to apply them to the subject in hand. We may only say that here



A COLORADO MINING VILLAGE SURROUNDED BY BEAUTIFUL
NATURAL SCENERY

DEFINITIONS AND PRINCIPLES

the great principles of order, which are the principles of design, rule supreme. To have everything done in perfect order—to have everything kept in perfect order—this is the keynote of civic art.

Civic art strives to secure this perfect good order—this maximum of utility plus a maximum of beauty—in the things which belong to the community. These public possessions are streets, commons, parks, playgrounds, school buildings, churches, libraries, town halls, court houses, and scenery, with various other important items. Unfortunately the sense, and even the knowledge, of common public ownership in such things is still very weak in America. For too many years we have laid every stress on the private ownership of our own individual property. All laws have been made to protect individuals in this personal right. All preaching has aimed to quicken conscience with reference to the rights of others. And so we have almost forgotten that most of the greatest gifts in the world belong to nobody—that is, to everybody—

RURAL IMPROVEMENT

that is, to us all. The air and the blue sky still belong to us anyway. The sweet water that falls from heaven belongs to us, too, except that many of us have chosen to live in cities and to pay someone to bring us our



A RURAL VILLAGE IN GERMANY

share of it. Then the schools are not mine nor yours, but ours; and the roads belong to no man, though the automobile hog may act as though they did; and the churches are the property of all, though Protestant secta-

DEFINITIONS AND PRINCIPLES

rianism has indirectly inculcated the belief that one or two men own each church; and the cemeteries are public property where we are all at last "free and equal" in spite of the Declaration of Independence.

And so all of us, acting together, strive to secure the best results attainable in the development of our common property, to secure the very highest utility, to enjoy the greatest possible beauty, and to maintain everything in the best possible order. This is civic art.

In the cities, civic art has been developed first. There are sufficient reasons for that fact. But the country, equally with the city, has public property, and should have more, and this property needs to be developed to its highest utility and to be equipped with every available beauty. Unfortunately again the sense of common ownership is weaker in the country than in the city, and harder to arouse. Practical co-operation is harder to secure. Greater efforts are necessary, therefore, to get community improvements under way in the country.

Another difficulty lies in the fact that communities have not such definite geographic limits in the rural districts as in the cities. An incorporated city has very precise boundaries. Any individual family resides in one city and not in two. (Families with residences in New York, Newport, Palm Beach and Reno do not count for anything in any connection.) In the country, however, every farm is the center of a neighborhood. These neighborhoods overlap and overlap again, never coming to an end except at the ocean or the impassable mountain. Practically this is the very difficult situation throughout the Central and Western states. In the New England states the town unit is so well developed politically that it makes a very convenient basis for all kinds of community action. A political club, a farmers' club, or a civic improvement society may easily be organized for any given town. Everyone in the town will accept his natural allegiance with such a society and work with it to the best of his ability.

DEFINITIONS AND PRINCIPLES

In the Central and Western states the county is the political unit. But the county is too big for the most effective work in civic betterment. Certain enterprises, to be sure, can be undertaken on a county-wide scale, and should then be under the direction of county societies. In those states where county patriotism has substantial growth every effort should be made to put it to good use. County improvement societies may be formed, on whose programs would appear such projects as (a) better county roads, (b) better county buildings, (c) county high schools and agricultural schools, (d) scenic and historic reservations.

But smaller units of organization must be found, even in most enterprising counties. Village improvement societies can take care of the small towns, and civic clubs or boards of trade or women's clubs of the larger ones. The country districts must not be forgotten, but should be divided up amongst the granges and amongst the local farmers' clubs (most of which are still to be organized).

RURAL IMPROVEMENT

We have spoken of the county unit, the town unit, the village unit, and the very indefinite country-neighborhood unit. Before dropping this subject we must have a look at the state unit. As a matter of fact there are many civic enterprises of state-wide scope, such as state roads, state parks, etc. Let it be distinctly understood that some of the finest civic accomplishments of the last decade have been in this field, and we may reasonably hope for more in the next decade. We have a sort of reason for this in the significant fact that the civic feeling is stronger within state boundaries than anywhere else in America. A Kansan is more proud of Kansas than of all the other stars on the flag; and a Mississippian will do more for his state than for any other geographical unit, big or little, in the universe; and a New Yorker always thinks that North America revolves round the Empire State. Inasmuch as patriotism and civic pride are pretty much one and the same thing, and as this civic pride is the ultimate foundation of all civic improvement, we may properly

A WELL-DEVELOPED FARMING COMMUNITY—ANNAPOLEIS VALLEY, NOVA SCOTIA



DEFINITIONS AND PRINCIPLES

expect best results where local patriotism is strongest, and may thus hope to accomplish some of the biggest and best things through state-wide movements.

The time is now fully ripe for the organization of state campaigns in all states where a fair stage of social and economic development (*i. e.*, a reasonably well organized civilization) has been attained. Such enterprises promise to be most effective if initiated and directed by the state agricultural colleges. A strong, aggressive, modern agricultural college can easily put into the field a small corps of experts who will assist the local communities in all the undertakings of civic betterment. These various undertakings are enumerated in the chapter on improvement programs, but may be recapitulated here for convenience. These experts, carrying this civic betterment propaganda throughout the state, would deal directly with such problems as these: (a) Good roads, location, construction and maintenance, (b) roadside and street planting, and care of roadside trees, (c) acquisition,

planning and management of public reservations, parks, picnic grounds, commons, and playgrounds, (d) location and design of school grounds, especially country schools and those providing school gardens, experimental grounds, etc., (e) location and design and care of public cemeteries, (f) care of country churches and church grounds, (g) location and design of all public buildings, more especially those outside of cities, (h) design and care of farm yards and village yards; (i) design, service and sanitation of farm buildings. In every one of these lines improvement is possible and desirable. Improvement in greater or less degree can be secured by putting before the people, systematically and urgently, the best modern ideas on these several subjects. No better line of work for rural betterment can possibly be undertaken by the extension services now organized in many agricultural colleges, or by any other organizations having in view the improvement of country life conditions.



NEW ENGLAND FARM BUILDINGS AND SURROUNDINGS

DEFINITIONS AND PRINCIPLES

All these civic improvement enterprises always look very formidable to the inexperienced person. Talk about town planning, country planning or a general state plan sounds altogether futile in such ears. What can be done after all to change the plan of a town already in existence? However, the works of civic improvement are, in fact, much easier to accomplish than the public ever believes. For the greatest part civic art undertakes only *to do in the right way instead of in the wrong way things which have to be done one way or the other.* Now, most people, even town and county officials, would rather do things right than to do them wrong. As the right way is usually the cheapest way, especially in the long run, there is in this fact another strong preference for the best things, whenever the public can be helped to see what plans are actually cheapest and best. The important point is to see that the public has a fair chance to know what is best. In an enormous number of cases public questions are decided without this knowledge.

RURAL IMPROVEMENT

In an experience in civic work covering several years I have often been surprised at the readiness, even avidity, with which apparently radical suggestions are sometimes accepted. I once asked an audience in a country town if they owned any public picnic ground. No, they said. Had they any places in town attractive enough for such uses? Oh yes, plenty of them! And then, after the lecture, and before we left the room, three men said they would personally give the land to the town. Dozens of similar instances could be related illustrating the ease with which the most substantial improvements are speedily and easily realized when the right idea is favorably presented.

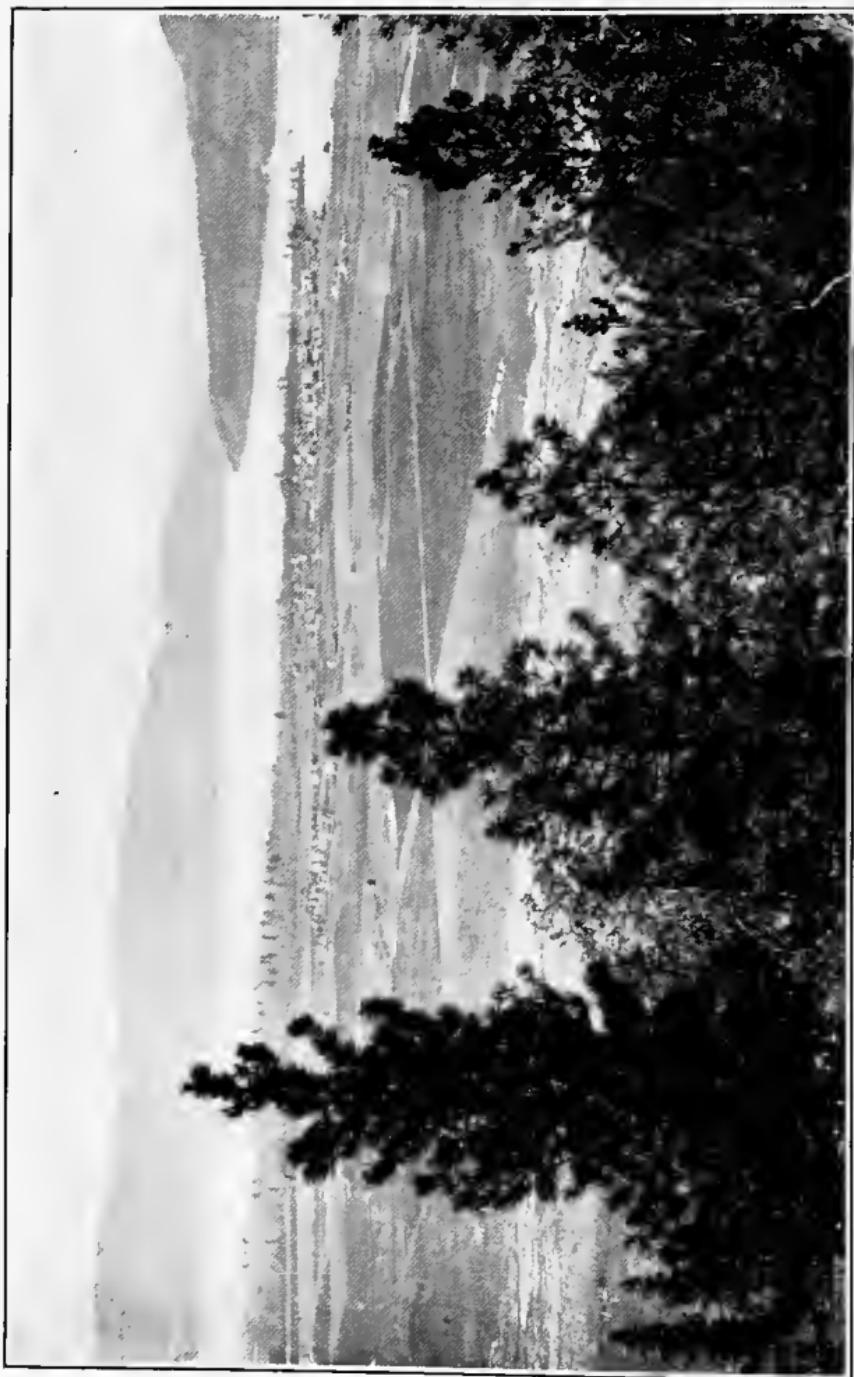
In other cases more time is needed. Indeed the time element is of supreme importance in most projects for public works. It requires time for any new idea to "soak in." When a new improvement is proposed it should be put fairly, fully and clearly before the public, *and kept there*. Let it be a plan for a new road or a public ball field,

DEFINITIONS AND PRINCIPLES

if a well-studied plan can be widely circulated and properly explained, and then if the drawings and data can be put up in plain view in the post office or other public place, and kept there, perhaps for several years, the work will be eventually carried out. It will almost do itself. The people become accustomed to the idea, they accept it as a probable result, and when the proper moment arrives they will assist in its final realization. Patience, prudence and preparation are the watchwords of civic improvement.

One more point of fundamental importance must be borne in mind. Although civic art deals only with the physical features of the community equipment (that is, with public property of one sort or another), these physical elements do not exist by themselves and certainly not for themselves. Industrial, social, educational, religious and other factors are present and powerful in the community life, and it is, indeed, for these things that the physical equipment is used. Now civic art in any form—village

improvement, rural improvement, or state improvement campaign—cannot go very far by itself. Improvement of the streets depends partly on improvement of local politics, and this in turn on better schools, and all together on better churches and a growing spirit of honesty and public service. Furthermore agricultural and industrial conditions must be improved in order that farms and factories may yield larger returns for the support of churches, schools, playgrounds, roads and even cemeteries. All community advancement must be gained by co-ordinated advance all along the line. Improvement of roads and public grounds must be accompanied by improvement in schools, by reform in politics and by genuine religious revivals. In like manner a wild religious upheaval without better streets is a waste of breath, or political reform without better schools is a delusion, or more scientific agriculture without more picnics and better churches and happier households is only vanity and vexation of spirit.



A PACIFIC COAST VILLAGE—KELowna, B. C.

DEFINITIONS AND PRINCIPLES

The great advantages of civic art are two: First, it deals with concrete problems and materials; that is, with property; and humanity, especially American humanity, has a most ineradicable belief in property. Civic art, therefore, supplies the basis on which communities most quickly rally, and on which a genuine co-operation can be most easily and effectively established. Secondly, civic improvement thereby becomes the indispensable training school for all higher forms of neighborly co-operation, such as deal with political, educational and religious reforms. In a double sense civic art is the unique foundation on which to build every kind of civic improvement.

Das regelmäsziae Parzellieren vom rein ökonomischen Standpunkte aus ist bei Neuanlagen ein Faktor geworden, dessen Wirkungen man sich kaum entziehen kann. Trotzdem sollte man sich dieser landläufigen Methode nicht gar so blindlings auf Gnade und Ungnade übergeben, denn eben hiedurch werden Schönheiten des Städtebaues geradezu hekatombenweise abgeschlachtet. Es sind dies alle jene Schönheiten, welche man mit dem Worte "malerisch" bezeichnet. Wo bleiben bei einer regelrechten Parzellierung alle die malerischen Straszenwinkel, wie sie uns im alten Nürnberg und wo sie sonst noch erhalten blieben, entzücken, hauptsächlich durch ihre Originalität, wie die Straszenbilder beim Fembohaus zu Nürnberg oder beim Rathaus zu Heilbronn oder der Brauerei zu Görlitz, dem Petersenhaus zu Nürnberg und anderen, welche aber leider durch fortwährende Demolierungen von Jahr zu Jahr weniger werden.

CAMILLO SITTE,
"Der Staedtebau."



A PLEASANT COUNTRY ROAD IN SLEIGHING TIME.

CHAPTER II

MEANS OF ACCESS

IF we regard the village as a unit, thinking of it as the home of a living community, we will see at once that it demands suitable openings for entrance and exit. There must be doors; there must be some way to get into the town. I know a number of excellent towns which are highly inaccessible; it is so hard to get into them that people seldom go there. There are no railroads, there are no trolleys, there are no good wagon roads, so the town is isolated. It is put aside from the currents of commercial and social life. Business and society become stagnant and the town suffers throughout its whole organization.

Many feel keenly the disadvantage of being cut off from railroad communication. Many a town has voted itself heavily into debt issuing bonds to secure the entry of a

RURAL IMPROVEMENT

railroad. In former years such strenuous exertions for railway connections were very common in the prairie states and have not been unknown to the most slow-going towns in New England. In many cases the railroad has proved the commercial and social salvation of a town. Almost every town which has a railroad feels the importance of this service, and would not for the world think of dispensing with it. What would a town do if the railroad were taken away? The result is too serious to contemplate.

In many parts of the country the old history of the railroad is being repeated in the extension of the trolley systems. Good trolley connections are now as important as railway connections. In many towns they are even more important. The trolley has come to be, in a large number of cases, the main entrance and exit.

All the while, the wagon roads have been growing in importance instead of decreasing in value. As travel by railroad and trolley increases, travel by wagon and buggy also increases. But the thing which has

MEANS OF ACCESS

brought the highways into special prominence, in the present decade, has been the unexpected extension in the use of automobiles. The public roads have much more use than they had 25 years ago, and much harder use. Instead of decreasing, their importance has increased.

All such roads leading into town, whether railroads, trolleys or wagon roads, are to be considered as "village portals." They are the approaches to the town. By them strangers come to get their first welcome, and old residents return with buoyant hearts to their homes. They are to be considered, therefore, and treated in their proper relation to the community life.

Considered as a welcoming portal to the village, the common railroad depot is often a sad disappointment. It is usually dirty and the grounds both inadequate and disorderly. The place is surrounded by the most unattractive business and the most disheartening architecture in the town. If there are any unsightly coal sheds, any evil-smelling stockyards, any noisome gas plant,

RURAL IMPROVEMENT

these things are certain to welcome the traveler at the railway station. It is just as though a private family should receive all its visitors, friends or strangers, at the back door, and should meet them there with a



GOOD ROAD LOCATION, SHOWING BEAUTY OF GENTLE CURVE

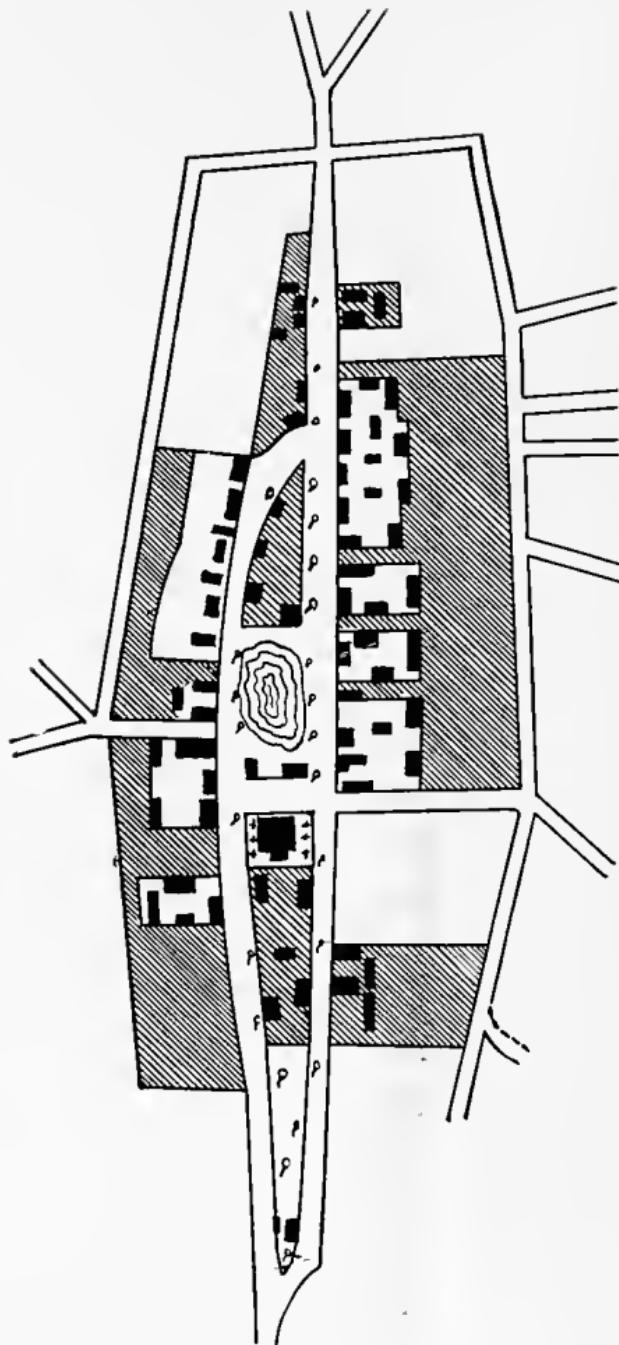
fine collection of garbage cans and slop jars. The situation, common as it is, is utterly wrong, preposterous and humiliating.

It can be improved. In fact, it can be radically changed. It is entirely possible

MEANS OF ACCESS

for the railway station to be what it ought to be, a pleasing and suitable introduction to the town. Fortunately, we do not lack for concrete examples. The famous railroad stations of the Boston & Albany road in the Newtons have been for many years a useful example to the rest of America. The Boston & Maine road has developed a few pleasant station grounds. The Chicago & Northwestern railroad has a number of attractive stations in the neighborhood of Chicago; the Pennsylvania Railroad has been able to secure a number of good examples along their line. Yet, for the present, these good examples are in a very small minority, taking it the country through.

Such improvements as have been secured in station grounds have been sometimes on the initiative of the railroads and sometimes on the initiative of the townspeople. The railroads themselves really ought to take this matter up. It is their business and they could well afford to do it. In cases where they do not willingly undertake it, the community should bring to bear every pressure



PLAN OF A GERMAN VILLAGE, SHOWING MAIN ENTRANCES

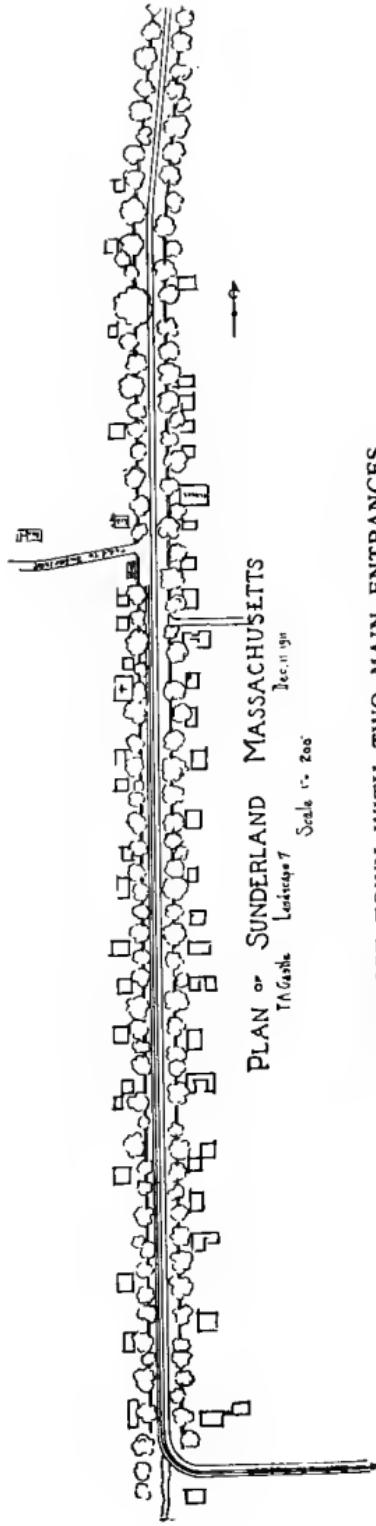
which it has at command. Doubtless, the most successful method will be that of co-operation with the railroad. The people of the town can do something and the railroad will usually be able to meet them half way.

A serious defect in the railway service in many cities and towns lies in the bad location of the railroad station or stations. It is by no means uncommon to find a country town in which the railroad station is placed a half mile, a mile or even more from the center of the village. The locations in many instances are nothing less than ridiculous. Evidently, they were determined upon by the railroad with very small consideration of the convenience of the public. The day has gone by, however, when the railroad can afford to disregard the needs of its customers. Indeed, very few railroad managers nowadays wish to do it. It is much better business to accommodate the public in every reasonable way. On this account we may expect substantial improvements to be made, under pressure from the community;

stations will be removed to more central locations and in other ways made more accessible.

Difficulties are greatly multiplied when three or four railroads have depots for the same town at widely separated points. I know a town of 2000 inhabitants which has four railroad stations, yet the two nearest together are a half mile apart, and one would be required to make a trip of possibly four miles to visit the four stations. Such an arrangement is really intolerable. It ought to be changed at once, and in a considerable number of cases it would be changed if everyone concerned could really see how expensive and inconvenient it is. A few moments' figuring will show that the people of the town are wasting thousands of dollars annually jaunting about all the points of the compass to reach such scattered depots.

The trolley entrance more commonly gives an attractive introduction to the village. The trolley is apt to come in by one of the best and pleasantest streets. The village improvement society should take pains



ONE-STREET TOWN WITH TWO MAIN ENTRANCES

RURAL IMPROVEMENT

to see that this street is kept clean so as to give strangers a good impression as they arrive.

The trolley is so new, however, that it has not quite found its place in the town. It has taken away a large part of the business of the steam railroad, without having accepted quite all the steam roads' responsibilities. This is especially the case with reference to waiting stations, and the time must soon come when all the principal trolley lines will provide suitable waiting stations, just as every railroad feels obliged to provide a passenger and freight depot. The village improvement society will then be under obligations to see that these waiting stations are centrally located (without their being put on the town common or permitted to obstruct the street), that they are built in attractive designs, that they are kept clean and orderly.

The main roads entering a town will, of course, be kept in good repair and their borders will be kept clean and attractive for the same reasons. Visitors coming by

MEANS OF ACCESS

carriage or automobile should be given a favorable impression. The building and maintenance of such roads will be discussed in another place.

When any given town or village is studied, it will be seen that the actual entrances are surprisingly few in number. There may be one or two railroad stations, but aside from this, in the very great majority of cases, the entrances are reduced to three or four main roads. Frequently the number of important entrances is still less. It becomes, therefore, a relatively simple matter to manage the entrance problem effectively.

Most of all, it must always be remembered that these entrances should have the character and dignity of village portals. Civilization has passed the day of city gates. We no longer have walled towns, guarded by drawbridge and portcullis. In olden times, it was literally possible to meet a stranger at the city gate and to bring to him the keys of the city. The fact that the gates have disappeared, however, does not mean

RURAL IMPROVEMENT

that we are less hospitable than formerly. Indeed, it means quite the opposite. We wish to welcome people freely and cordially to our town. We must see, therefore, that the town entrance is clean, dignified, hospitable, inviting. We should give to it the same character which we would give to the front door of a church or to the front doors of our own homes.

Roadways are generally made crowning in the center, so that water runs to the sides, but frequently the fall lengthwise of the roadway is less than it should be. City engineers are usually inclined to make the grade along the length of a street as nearly level as possible. Authorities who have given the subject of roads considerable study recommend a fall lengthwise of not less than one foot in one hundred and twenty-five, nor more than six feet in one hundred. Such grades are not always feasible, but a certain amount of variation in level can usually be made in a residence street which will make it much more pleasing in appearance, and have certain practical advantages in keeping the street dry.

L. H. BAILEY,
“Garden Making.”

CHAPTER III

ROADS AND STREETS

ROAD improvement is one of the most obvious forms of rural betterment. It is also one of the most fundamental. It is most closely and positively related to economic advances; and improvement in economic efficiency forms the absolute basis of all permanent community progress. Every phase of country and village life is affected by the condition of the public highways—usually profoundly affected. Centralized schools and rural mail delivery wait on good roads; church congregations fluctuate with the condition of the highways; and one political party or the other carries the election according to whether the rural roads are passable and the country vote comes to the polls.

It has been estimated rather carefully that there are 2,200,000 miles of public roads in

ROADS AND STREETS

the United States. Between 8 and 9 per cent of this enormous mileage has been improved by surfacing with gravel, oyster shells, stone and other material. Something



VILE COUNTRY ROAD

Thousands of miles like this still exist

over ninety per cent of the public highways, on the other hand, are totally unimproved.

It has been shown also that the average cost of handling farm crops on the public

RURAL IMPROVEMENT

roads of the United States is approximately 23 cents per ton mile. The cost of hauling similar freight on the highly improved roads of France and Germany is known to be about 8 cents per ton-mile, or only a



THE IMPROVED ROAD IMPROVES THE SCHOOL

trifle over one-third the average cost in America. We may show these differences in our own country by comparing the relatively good roads of Massachusetts with the average unimproved roads of Arkansas. The average cost of hauling farm crops in

ROADS AND STREETS

Massachusetts is calculated to be $9\frac{1}{2}$ cents the ton-mile, while in Arkansas it is over twice as much, or 20 cents. Inasmuch as the average distance from farm to railroad station is about twice as great in Arkansas as in Massachusetts, the farmers of the former state are paying about four times as much for hauling their crops to market. And this computation makes no account of railroad freight charges either.

The Bureau of Road Inquiry in Washington has estimated that in 1906 there were over 200 million tons of farm, garden and forest products hauled to railway stations by wagon over an average haul of 9.4 miles, which, at the rate of 23 cents per ton mile, would mean the enormous expense of \$432,-400,000. And this certainly represents less than one-half the use of the highways. If our roads could have been as good as the best of the French and German roads, so as to reduce this cost to 8 cents per ton-mile, it would have meant the saving of \$278,-130,000.

Statistics which we need not stop to quote

RURAL IMPROVEMENT

will show further that the money spent in this country for road improvement is largely wasted. This is more disheartening than the other fact that the sums raised for road betterments are always too small. Considering these figures, which are rough but safe estimates, or looking at the matter from any standpoint, it appears that the road problem is one of enormous magnitude and incalculable importance.

ROAD AND STREET PLANNING

In America we are too much committed to the rectangular, checkerboard system of road design. The damage has gone farthest in the flat prairie states of the Central West, but it has gone too far in every state. Towns which are suddenly created, as those of Minnesota and Oklahoma, are most subject to this defect. The town is made first on paper, months or years before it exists on the land; and in projecting such a town it is always easier to draw the map with the straightedge than to follow contours. On

ROADS AND STREETS

the other hand, those villages of New England, old England and the old country generally, which have grown up gradually and were not mapped until their growth was



COUNTRY LANE IN AUTUMN

accomplished, have a very different layout. The plan is much more irregular than that of the Oklahoma town; it seems less simple and less logical. The fact is, however,

RURAL IMPROVEMENT

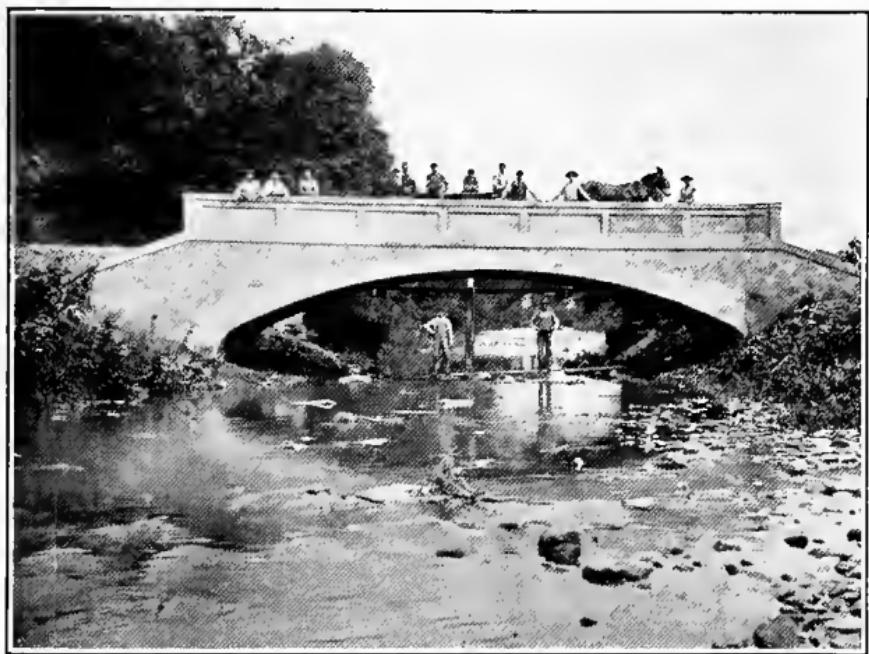
that it is more natural and therefore more logical and convenient. Besides being more natural and convenient the irregular arrangement is infinitely more pleasing to the eye. Compare the best prairie town in Illinois, Iowa or Nebraska with the poorest rural village in England, Germany, Switzerland or Northern Italy and see how bright and picturesque appears the latter, how plain and stupid appears the former.

Modern study of the problems of street and road design has developed some pretty definite ideas which we may present as simple rules.

1. *Main roads should be as direct as possible between all principal centers.* This principle is constantly violated in town and country. The railroad depot may be eight blocks south and six blocks west of the hotel, but the omnibus has to travel fourteen blocks to and from every train; while if there was a reasonable diagonal street the distance would be reduced to ten blocks, and a haul of eight blocks saved in every round trip. This would mean a saving of

ROADS AND STREETS

several dollars every day—combining all traffic—in the smallest and sleepiest town. It is incomprehensible how the big and thriving towns, accustomed as they are to take themselves so seriously and to boast of



THE MODERN CEMENT BRIDGE ON COUNTRY ROAD

their practical improvements and their business enterprise, should ever tolerate such an absurd and wasteful town plan.

It is an odd fact that the people who live on the central prairies imagine that their

rectangular road system is correct and are always laughing at the crooked and irregular roads of the northeastern states. The New England system, though by no means perfect, is much the better.

For a concrete example let us look at Saline County and Rice County, Kansas, two counties which almost touch corners. From Salina, the county seat of Saline County, to Lyons, the county seat of Rice County, the direct distance is roughly 55 miles, say a good two hours' ride in a comfortable automobile. But there is no direct road, and the traveler would be obliged to "follow section lines" all the way, sometimes on good roads and sometimes on poor roads, turning at right angles every few miles, and covering 80 miles of such road instead of 55 miles of straight trunk road which a better system would put at his disposal.

2. *Main roads should be well built and well maintained.* Where there are no main roads, all highways being 66 feet wide, it is difficult to carry out this rule.

3. *Secondary roads should be narrower,* and the cost of construction and maintenance should be proportioned to their importance and use. In the prairie states, opened under government survey, all roads are 66 feet wide—a most absurd width for the majority of them. Nine-tenths of these roads could be narrowed to one rod in width, leaving less space for the road overseers to care for and adding six acres of farming land to each mile of farms.

4. *The radiating or spider-web system of roads is generally best,* but this must always be more or less modified to meet the local conditions. Of these local conditions the most important is the one next to be mentioned.

5. *Roads and streets should follow the contours of the land.* Instead of being forced in straight lines directly over hills, streets should circle about the hills on practicable grades.

The protection of roads where they cross railway lines at grade, and the abolition of grade crossings wherever practicable, are

also points to be kept in mind in all schemes of road improvement.

In any local scheme of road improvement there is much to be done besides making



THE CONCRETE BRIDGE ON A LARGER SCALE

A bridge of beauty as well as utility

the attempt to apply the foregoing rules. The rules, indeed, cannot be carried out, except in part, in any established community. More changes can be made, in the

course of time, than one would suppose; and it is possible by careful study and continued effort to approximate these ideals more closely than the pessimist would admit. Yet in most neighborhoods the improvement of the road plan is largely a matter of adjusting details—of clearing up small defects. A heavy grade may be abolished in one place; in another place a bridge may be put in so as to offer a shorter cut between important traffic points; one road may be turned along a level valley instead of being forced over a hill; another road can be diverted round a swamp; and so on through the list. There is hardly a township in the United States where the road plan could not be improved; and in many cases truly revolutionary improvements would be possible.

When all practicable changes in road plan have been made there remain such important improvements as cuts and fills, bridges, culverts, drainage, macadamizing, etc. Road improvement is in fact a never-ending task.

RURAL IMPROVEMENT

KINDS OF ROAD CONSTRUCTION

There are hundreds of systems of road making, and thousands of variations of these systems. The subject is such a large and difficult one that there have been dozens of books written on it. It would be quite out of place here to take up a treatise on road construction, but it is worth while to notice



PICTURESQUE AND SOLID STONE BRIDGE

a few of the more important methods, with special reference to their adaptability to rural conditions and village improvement. Of course, we must not lose sight of the fact that, with state assistance, and perhaps eventually with federal assistance, in the building of permanent highways, we shall be constantly tending toward more and

more permanent and expensive types of construction. While we must urge that more thoughtful study be given to the common earth roads, we must not lose any opportunity to introduce telford or macadam.

Earth Roads. Taking it the continent over, it would be perfectly safe to guess that ninety-five per cent of all the country roads are earth roads. Probably a proportionate number of these are of the local soil without amendment. If the road passes over a sandy stretch, the road bed is of sand; if the way passes over clay or black loam, the road bed is of the same material. These roads have been constructed at very low cost, thousands of miles having cost practically nothing at all, and the annual maintenance expense is kept in proportion. But the results are not always satisfactory. As soon as the traffic begins to make any severe demands on such roads they prove inadequate, and substantial improvements are required.

Nevertheless, well-made earth roads are often among the pleasantest to travel and often render very satisfactory service. In

RURAL IMPROVEMENT

constructing earth roads, drainage is a prime requirement. Underdrainage with tile should be applied wherever thorough work is attempted. This should be supplemented by proper side ditches, and surface drainage should be constantly assured by keeping the road crowning and well graded. The proper construction of earth roads is greatly facilitated by the use of good modern road machinery.

Gravel Roads. Next to the earth road we may place the gravel road. Almost anywhere where any sort of gravel can be secured it can be used to advantage in improving the surfaces of earth roads. However, there are very great differences in gravel roads, some being no better than unimproved loam, others being hardly less satisfactory than good macadam. The gravel should be of good quality, that is hard and tough. It should be of different sizes and it should contain or should be mixed with some sort of binding material. Clay is the material most commonly used as a binder, but limestone, ground oyster

shells, fine silica and other local materials are often used.

Burnt Clay Roads are finding some favor in sections where sand and gravel do not exist and where stone roads would be too expensive. In such districts where the soil is tough, sticky clay, the common earth roads are particularly bad. During the spring season they may be impassable for weeks. By thorough burning, however, this clay may be rendered so hard as to make a fairly good road material. It is then broken into lumps and rolled into place on the road surface much as gravel is used.

Sand-Clay Roads. Sand and clay mixed in proper proportions and suitably worked into place make a most excellent earth road. Frequently they do not naturally exist in the right proportions. There may be too much sand, in which case the road bed cuts to pieces and traction is very heavy. Or there may be too great a proportion of clay, in which case the road bed absorbs water and becomes sticky and impassable. Where these deposits of clay and sand exist in the

RURAL IMPROVEMENT

same neighborhood, however, they may be artificially mixed in the right proportions; after which, with proper working, they make excellent country roads.



RUSTIC BRIDGE, BEAUTIFUL AND SATISFACTORY

Oil or Tar Roads. Various kinds of oil, tar and asphalt have been used in road making. These are applied in various ways to sand roads, clay roads, gravel roads, and even to stone roads. The results vary all the way from complete satisfaction to utter fail-

ure. Oil and tar in the hands of experienced engineers seem to be generally rather valuable, more especially in the preservation and maintenance of well-built streets. At the present time it can hardly be said that these materials promise much for the improvement of rural highways under the management of untrained road overseers.

Stone Roads. Telford and macadam roads constructed of stone at an expense of \$3,000 to \$10,000 a mile have proved altogether the most satisfactory styles of road construction. The initial cost is so great as to limit their use to a small fraction of our national road mileage. The high cost also makes it wise at all times to undertake their construction only under the direction of trained engineers. However, where a reasonable state road policy has been adopted with a view to the development of permanent roads, these more expensive methods of construction should nearly always be used. Even under county subsidy and control a considerable proportion of permanent stone road ought to be built.

RURAL IMPROVEMENT

ROAD TAXES

Road taxes in America are mostly of three kinds, as follows:

1. *Poll taxes*, levied in nearly every state, usually at the rate of \$2.00 per head. Often these are payable in labor, and in many districts practically the whole amount is collected in this form. It is an old custom, and a thoroughly bad one. It represents a state of social and political organization too crude to be tolerated anywhere in America, where newspapers penetrate. The poll tax is unjust in principle and vicious in practice.

2. *Property Taxes*, levied with other taxes, sometimes by towns, sometimes by counties and occasionally by states. These are and should always be the principal support of the public roads.

3. *Special Taxes*, as those on dogs, automobiles and other special luxuries. There seems to be an obvious propriety in taxing automobiles for the support of road improvement, for these machines are exceed-

ingly destructive to every sort of roadbed on which they run.

ROAD MANAGEMENT

The highways of the United States are under various forms of ownership and control. Usually control follows ownership, but occasionally state-built roads are turned over to local control. The principal forms of management are by towns, counties or states.

The town form of government, prevalent in the New England states, usually carries with it the ownership, support and management of the bulk of the roads. The actual management commonly falls to a highway surveyor or similar elective individual, subject more or less to direction from a board of selectmen, and subject further to special instructions through votes in town meetings. In western states, where the town form of government is hardly known, the roads are looked after by districts. There may be two to four districts to each township, with a separate road overseer elected for each dis-

RURAL IMPROVEMENT

trict. This system is the least efficient and satisfactory yet devised. The administrative district is too small, the responsibility of the overseer too slight, the interests of the citizens too much scattered. The town system in the eastern states is better, because the responsibility of the highway surveyor is larger and better enforced.

In a few states county systems of supervision have been put on trial. These systems usually provide for the election of a county engineer or road surveyor, with more or less control by the board of county commissioners. These county systems have generally been proposed as reforms, and two special objects are commonly sought: First, a larger accumulation of funds can be applied to the construction of permanent roadways on important routes instead of frittering everything away in little dabs on unused byways. Second, the county can pay the salary necessary to command the continuous services of a trained engineer. On the face of it this system is much better than the town or district system, but it has not yet

ROADS AND STREETS

established itself widely throughout the United States.

Several of the more progressive states have now established systems of state roads, usually employing expert engineers under the direction of a permanent state highway commission. These systems of state roads, supplementing county or town roads or both, have fully justified their creation. They should be extended rapidly to every state in the Union.

A good deal has been said about national aid to good roads. National roads have been discussed since the foundation of the federal government, and at the present time federal aid is strongly urged by an enlightened and influential section of our population. The present writer entertains serious doubts as to the wisdom of this policy, feeling that the present tendency to invoke federal aid and control in every sort of enterprise is being enormously overdone, and that there is likely soon to be a strong reaction toward state sovereignty.

Under whatever system or systems the

RURAL IMPROVEMENT

work may be done, its very great importance is altogether obvious. Road improvement is one of the most primary, most far-reaching and most persistent forms of rural or village betterment. In this connection it is



STONE MASONRY BRIDGE WITH GOOD PLANTINGS

interesting to note the findings of the Country Life Commission. After their extended public hearings and letter inquiries, covering with remarkable thoroughness all parts of the United States, they had the following

report to make on the question of rural road improvement:

"The demand for good highways is general among the farmers of the entire United States. Education and good roads are the two needs most frequently mentioned in the hearings. Highways that are usable at all times of the year are now imperative, not only for the marketing of produce, but for the elevation of the social and intellectual status of the open country and the improvement of health by insuring better medical and surgical attendance.

"The advantages are so well understood that arguments for better roads are not necessary here. Our respondents are now concerned largely with the methods of organizing and financing the work. With only unimportant exceptions, the farmers who have expressed themselves to us on this question consider that the Federal Government is fairly under obligation to aid in the work.

"We hold that the development of a fully serviceable highway system is a matter of

RURAL IMPROVEMENT

national concern, co-ordinate with the development of waterways and the conservation of our native resources. It is absolutely essential to our internal development. The first thing necessary is to provide expert supervision and direction and to develop a national plan. All the work should be co-operative between the Federal Government and the States. The question of federal appropriation for highway work in the States may well be held in abeyance until a national service is provided and tested. We suggest that the United States Government establish a highway engineering service, or equivalent organization, to be at the call of the States in working out effective and economical highway systems.” .

Nicht jeder Baum eignet sich für jede Strasze. Nur gedankenlose Unwirtschaftlichkeit wird für die Strasze beliebige Bäume anpflanzen. Der Boden, der Zweck und schlieszlich auch der etwaige Nutzen werden in erster Reihe zu beachten sein, wenn man den Baumschmuck auch künstlerisch einwerten will. Nicht die Gleichheit der Bäume oder ihre Verteilung an den Wegen macht die künstlerische Wirkung, sondern die überlegene Planung, die für jeden Weg den entsprechenden Baum zu finden weisz, der im Zusammenhang mit dem ganzen Landschaftsbilde durchaus harmonisch sein follte.

ROBERT MIELKE,
“Das Dorf.”

CHAPTER IV

ROADSIDE TREES

NOTHING goes farther to give a rural village an air of peace, prosperity and happiness than an abundance of well-grown trees along its streets. This truth needs no argument; it is universally accepted. Trees are introduced into city streets as far as traffic will allow, and many miles of country road have likewise been planted. With respect to the country roads it is easy to judge that tree planting has not gone far enough. Stretches of tree-lined country streets are still decidedly rare; and unquestionably all rural dwellers and country travelers would be glad to have more planting done. It might not be desirable to have every mile of country road bordered by trees, and in some places they would be a distinct detriment; but for the present everyone is safe in practicing and

urging on others the planting of good adaptable trees on public and private streets in all villages and rural districts. Such improvements will add to the beauty of any farm. Road planting, if generally undertaken in any neighborhood, would quickly bring that community into high reputation for progressive public spirit. A campaign for the upbuilding of any neighborhood can hardly miss this easy and attractive feature of roadside planting.

On country roads a good many species of



CUT-LEAVED MAPLES ON A NARROW VILLAGE STREET

RURAL IMPROVEMENT

trees can be used which are unavailable in city planting, as, for example, white pines and evergreens generally. These make possible magnificent effects otherwise unknown. Fruit trees, too, are sometimes planted along country lanes. In the apple districts of Nova Scotia, for instance, there are miles of streets glorious in May with apple blossoms and at harvest time with the ripening fruit. The practice of growing fruit trees on public roads, the community owning the trees, is often recommended in America, the recommendations usually being fortified by citations from European practice. After having traveled through all the countries of central Europe, I am left with the impression that this scheme of fruit trees along public roads is much less common and much less successful than enthusiastic newspaper writers have allowed us to believe.

Tree planting nowadays is largely done on arbor day. There is no objection, however, to planting trees on other days. The old Scotchman's advice holds good univer-

sally, "Aye be plantin' a tree, Jock!" Arbor day exercises ought to be encouraged, though, and more systematically planned for. Each school district or country neighborhood should have some settled scheme of tree planting. The usual custom of waiting till arbor day morning, and then looking about to find a corner where some tree may be bestowed, is not sufficiently foresighted to suit rational people. There should be a neighborhood plan in which it is specified, on the basis of proper study and consultation, that this street is to be treated in one way and that street in another. Then when it is thus deliberately planned to set a certain stretch of public road to pines or oaks or cottonwoods the school can turn out on arbor day, and with the help of parents and friends, set a stretch of the permanent rows.

In all the northern states spring planting is the most common practice and is generally to be recommended. In the southern states winter is usually the better season for setting out trees.

RURAL IMPROVEMENT

Street trees usually receive very little care. Often the small attentions they receive are worse than useless, coming from the trolley men or telephone linesmen, who



NATURAL GROWTH OF TREES AND SHRUBS, GIVING BEAUTIFUL
ROADSIDE EFFECT

cut and hack them to pieces to make way for ugly and unsafe wires. The practices of many wire stringers is hardly less than criminal, and it is a wonder that any civilized

community would allow the work to go on unchallenged. In every neighborhood there ought to be some officer or some mobile and effective committee especially authorized to take the part of the trees and to prevent these shameless, senseless and useless depredations. Where no other officer has the work particularly assigned to him it is the duty of the road overseer or street commissioner to look after the trees. They stand in the public roads and are as much public property as the bridges and culverts. Strangely enough, road overseers generally do not take this part of their work seriously. Not only do they neglect to protect the street trees, but many of them are themselves the perpetrators of the most wretched indignities upon their wards. A higher standard of morals and common sense needs greatly to be inculcated in these matters.

In some states, as in Massachusetts, the law provides for the appointment of special tree wardens. Such officers, if properly chosen, can do a vast amount of good. In

any state where the tree warden system exists an annual conference or school of instruction for these men is of immeasurable value. Each local man attending such a conference has a chance to check up his own work, to see what good ideas have been



THE WILD ROADSIDE IN SPRINGTIME

adopted by the best tree men in his state, to receive expert instruction on insect and fungus diseases and on spraying and to acquire a new head of enthusiasm to carry him through the drudgery of another year.

In well-managed parks and on private

estates nowadays considerable time and money are spent in the care of trees. Each good large tree is worth a large sum of money, running into hundreds and even thousands of dollars. It is fair to say that each mature tree is worth an average annual care of one to five dollars. A village which has 1,000 good mature trees to care for should spend at least \$1,000 annually on them; and in sections where elm-leaf beetle, gipsy moth, the telephone linesman or other serious pest has to be fought, this cost should be trebled or quadrupled or more.

Trees need fertilizing: some street trees starve to death. In many sections street trees need irrigation. Trees need pruning, and this work should be done by intelligent men—not left to the tree butcher. Spraying is absolutely necessary in many districts and would be a paying investment in many others. There are professional men in all parts of the country now who undertake all these kinds of work, but the tree warden or some reliable local nurseryman is usually

RURAL IMPROVEMENT

the best one to be intrusted with it. The professional "tree doctors" are mostly tree quacks, and many of them are humbugs of the first quality; though there are indeed a few honest men in the fraternity and another few who really have some expert knowledge of trees.

THE BEST KINDS OF TREES

The best street tree known is probably the American elm. It comes nearest the American ideal. Its broad-spreading, shady top, its arching branches, and its general air of dignity commend it strongly to the American taste. It is planted by preference everywhere in the region where it succeeds. This region, however, is rather closely limited to the New England states, New York state, Michigan, Ohio, Pennsylvania, and northern New Jersey. Westward and southward it does not succeed so well, and though frequently planted, it is generally less valuable than other species. At the present time, the American elm is suffering

seriously from the elm-leaf beetle, and with this attack suffers also a waning favoritism. The elm-leaf beetle, combined with many other troubles, has killed thousands of the best elms in the eastern states during the past few years. The beetle can be restrained by proper spraying, but this is expensive and requires considerable political organization as well as horticultural apparatus.

The English elm is sometimes planted in America, but does not do well as a street tree. Under no circumstances is it to be compared with the American elm. It suffers equally from the attacks of the elm-leaf beetle. The cork elm is planted in some districts in the western and central states, and is regarded as a very promising sort. It is a native of Michigan and Ontario, and is to be specially recommended in that section.

Next to the elms, the sugar maple doubtless makes the most attractive street tree, especially for country roads. It does its best on the rich rolling uplands of New England, Quebec, Ontario, New York, Michi-

RURAL IMPROVEMENT

gan, Ohio, Pennsylvania, and northern New Jersey, thus covering much the same section as the American elm. Outside of this region it is practically worthless. In the central prairie, and Rocky Mountain states, the place of the sugar maple is usually taken by the silver or soft maple. This is a much less valuable tree, and never reaches the size or dignity of the northeastern rock maple. It has the advantages, however, of growing rapidly, of withstanding drouth, and of being otherwise adapted to the exigencies of street planting in the prairie states. Along with the soft maple, one finds also the ash-leaved maple, or box elder, which is suited to even drier, warmer districts. It is planted on the extreme edge of the prairies, where no other trees grow. It has the advantage of growing quickly, but very little else to recommend it.

The Norway maple is also largely planted as a street tree, and while it has advantages in certain localities, and perhaps is better adapted than other maples for narrow city streets, it is not generally to be

ROADSIDE MADE PLEASANT WITH APPLE ORCHARDS—NOVA SCOTIA



recommended. It has been thus far more widely planted than its merits deserve. The sycamore maple stands somewhat in the same class, being a good ornamental tree and worth using in special circumstances, but not to be compared with some of the native sorts for general street planting.

Doubtless the next place in our list of trees belongs to the sycamore or buttonwood. The American species thrives over a wide range, from the eastern seaboard to central Kansas and Nebraska. It is a large tree and requires plenty of room. For this reason, it is better adapted to the broad streets of country villages and to country roads than to most other situations. The European plane tree, or sycamore, is somewhat more formal in habit of growth, more symmetrical, and not quite so large. This makes it better for formal streets. It is a species which deserves more general planting in the central and eastern states.

The American basswood or linden succeeds throughout the central and eastern states, and is sometimes planted with fair

RURAL IMPROVEMENT

satisfaction, especially on country roads. The European linden is very much better, however, as a street tree if one succeeds in getting a good variety. There are a number of different varieties sold by nurserymen, but these are so badly mixed at the present time that it would be difficult to separate them. Most of the varieties are fairly good. The linden is particularly good for village and city streets.

Another tree which is well adapted to street use is the horse chestnut, the European species being generally best. This has not been used as much as it deserves, and should be more widely planted, especially in Pennsylvania, Virginia, and the central and southern states. It has some defects, but these have been too much magnified by its critics.

The native American ashes, especially the white ash, are good street trees. They are healthy, vigorous, symmetrical trees and subject to few enemies. They form comparatively low heads, and this makes them inconvenient for planting along the line of

sidewalks. For farm roads and country streets, on suitable soils, they will be found wholly adapted.

The oaks have never had the favor which their merits deserve. They make excellent street trees. The common notion that they grow so slowly as to make them undesirable is not justified by the facts. The pin oak, red oak, scarlet oak, and white oak, all make good street trees and grow almost as rapidly as the elms or maples, when properly established on good soils. The pin oak is particularly graceful and attractive, and is now coming into something like general favor. Other species of oaks are desirable in particular localities. The live oak is everywhere planted and admired in California and the Gulf states. In the central and southern states, on heavy, moist land, the willow oak is a particularly beautiful tree. Its charm is widely recognized in its native region, but the species has not been sufficiently utilized for street planting, perhaps largely because it does not succeed on high, dry situations chosen for village streets.

In the prairie and Rocky Mountain states the poplars are widely used and enjoy a well-earned favor. Their rapid growth, freedom from disease, their ability to withstand drouth and other untoward circumstances make them invaluable. In some circles it is fashionable to sneer at the poplars, but they deserve more kind treatment. The American cottonwood and the Carolina poplar are the most valuable kinds. The Lombardy poplar, sometimes used in the eastern states, is valuable for special effects. It is not to be generally recommended for street planting.

The black locust is sometimes planted in the central and western states. Formerly, it was widely used in the eastern states, particularly in the district of Long Island. In general, it is not suited to American conditions and should not be chosen when other trees can be grown. In Europe, where it is frequently planted, it is grown in the form of small pollards, and under this treatment makes an excellent ornamental effect along narrow city streets and about city squares.

ROADSIDE TREES

There is very little demand for anything of this kind in America, and especially in rural districts.

The ailanthus is worth using in some special instances in the central and southern states. It is particularly good for city streets, where the smoke and dust seriously handicap other better species.

The hackberry somewhat resembles the elm in general appearance and may be profitably substituted for it in many places in the central states.

The honey locust, umbrella tree, pepper tree, various palms, and various eucalypti, besides other odds and ends of trees, are used for street planting, sometimes with excellent effect. All these belong in particular localities and are to be used in special instances.

TREES FOR VARIOUS LOCALITIES

The following paragraphs will give a general idea of the best trees and those most commonly grown in the various parts of the country. It should be understood, however, that local conditions vary enormously, and

RURAL IMPROVEMENT

that great care should be taken in all cases to select such species as are adapted to particular soils and other special local condi-



WILD BLACKBERRIES AND MIXED SHRUBBERY ALONG THE COUNTRY ROADSIDE

tions. When trees are planted, it is for a long term of years, and mistakes are not easily rectified. It is highly important that trees well adapted to the site should be

chosen and a good start made, because the uniformity of the street rows is a very important element in their beauty.

New England. The American elm unquestionably stands at the head of New England trees. The second best tree for New England planting is the rock maple. Probably the third best tree for New England conditions in general, and especially for planting on the large streets of villages and country districts, is the sycamore. Many of the oaks are also desirable and have not been sufficiently used. White pines, which cannot be used in cities, nor even in busy villages, produce magnificent effects when planted in avenues along country roads. An avenue of white pines leading up from the public street to a farmhouse, in the southern manner, makes a magnificent effect, though one rarely seen in New England. Other coniferous trees which can be used in New England rural districts are the native spruce and the Norway spruce. The Canada balsam is sometimes planted in New Hampshire and Maine.

RURAL IMPROVEMENT

Central States. In this section the American elm is still planted to some extent; the silver maple takes the place of the sugar maple; the sycamore becomes relatively more valuable and should be widely planted; and the poplars begin to deserve considerable notice. Catalpas are sometimes used for street-planting, but are not generally valuable. The hackberry, the honey locust, and the ailanthus are worth using in special instances. The several species of native oaks should be more widely used.

Central-Southern States. In this district, the cork elm takes the place of the American elm to a large extent. The Carolina poplar is successful and valuable. The American and European sycamores grow especially well and should be largely used. Some of the European lindens are excellent. The native oaks, especially the pin oak, should be largely used.

Gulf States. In this section, the sycamore is still valuable, and the American elm is grown to some extent; also the cork elm and the hackberry. The sweet gum is a



PLEASING GROUP OF ROADSIDE PINE TREES

beautiful and valuable tree, especially for rural villages and country districts. The live oak is everywhere highly regarded, and the willow oak should be more widely planted. The native magnolia is quite widely used, especially in villages, but is not often presented in the long, dignified street rows, as it should be. The camphor tree and the Texas umbrella tree are also used to some extent. Palm trees are occasionally attempted in street plantings, especially in Florida, but the examples of their successful use are very rare.

Prairie and Rocky Mountain States. In this naturally treeless region, species must be chosen which will withstand drouth, and the poplars are among the best of these. The cork elm is coming into greater favor, the American elm being attempted only on the rich bottom lands, with relatively large water supply. On land not too dry the pin oak also does well. In the very driest regions, dependence will be placed on honey locust, hackberry, and box elder. It is difficult to secure fine street trees in this section

RURAL IMPROVEMENT

except in those fortunate localities where irrigation is practicable. Still, much can be done to give the landscape a dress of greenery, to supply shade for streets and door yards, and to give villages and farm yards a tidy and homelike appearance. Efforts of this kind count for more in such a district than they do in sections where trees grow themselves and have to be cut down to make room for civilization.

Washington and Oregon. Professor C. I. Lewis writes me that for this region the growing of street trees is more or less in an experimental stage. He says: "The tree that is used more than any other is the Oregon maple, but it is of doubtful value as a street tree. It is more adapted to some of the country roads, farm homes, etc. The cork elm is proving to be one of the finest trees that we have, it stands drought, and also moisture, and is the best elm. The black locust is especially good, is a better tree than the honey locust, is long lived, and has good characteristics for our street trees. The Oriental plane is a fine tree, and

the European linden should be used more than at present. The scarlet oak I have noted also will do splendidly, since I have seen quite a number of them in some of our towns. Walnuts are planted to quite an extent, but I do not recommend them. The California maple should be given more of a trial than it has had. The horse chestnut is being planted quite a little. When you get up into eastern Oregon, and the table lands of the Inland Empire, the box elder, black locusts, and the poplars are the best. The native poplars seem to be the hardiest of all, and succeed where many other trees will fail."

California. In an admirable article on trees for California planting by Mr. J. Burtt Davy in Bailey's "Cyclopedia of American Horticulture" the following trees are recommended for streets 60 feet wide or less: White birch, yellow birch, paper birch, poplar-leaved birch, three species of catalpas (*C. bignonioides*, *C. ovata* and *C. speciosa*), *Koelreuteria paniculata*, *Helia Azedarach umbraculiformis*, *Paulownia*

RURAL IMPROVEMENT

imperialis, *Rhus typhina*, *Sorbus aucuparia*. Amongst palm trees for similar streets the following species are recommended: *Cordyline australis*, *C. Banksii*, *C. indivisa*, *C. stricta*, *Erythea edulis*, *Livistona australis*, *Trachycarpus excelsus*, *Washingtonia filifera*, and *W. robusta*. Other evergreen species, however, are often better than palms, and of these Mr. Davy recommends *Acacia Baileyana*, *A. cyanophylla*, *A. falcata*, *A. lineata*, *A. longifolia*, *A. neriifolia*, *Myroporum laetum*, *Pittosporum eugenioides*, *P. tenuifolium*, *Herculia diversifolia*. For larger streets of 80-100 feet width, the following deciduous trees are named: Silver maple, white ash, velvet ash (*Fraxinus velutina*), coffee tree, pecan, American sycamore, *Quercus pedunculata*, black locust, Scotch elm. There are several large growing palms also which will serve for planting wide streets. The most popular are *Washingtonia filifera*, *W. robusta* and *Livistonia australis*. To these should be added the larger species of acacia and eucalyptus

ROADSIDE TREES

Mr. Davy also names a long list of trees as suitable for California country roads, as follows:

DECIDUOUS

<i>Acer campestre,</i>	<i>Liriodendron Tulipifera,</i>
<i>Acer macrophyllum,</i>	<i>Paulownia imperialis,</i>
<i>Acer Negundo,</i>	<i>Phytolacca dioica,</i>
<i>Acer Negundo, var. Califor-</i>	<i>Populus nigra, var. Italica,</i>
<i>nicum,</i>	<i>Quercus lobata,</i>
<i>Acer platanoides,</i>	<i>Quercus pedunculata,</i>
<i>Acer saccharinum,</i>	<i>Robinia pseudacacia,</i>
<i>Aesculus carnea,</i>	<i>Sophora Japonica,</i>
<i>Aesculus Hippocastanum,</i>	<i>Taxodium distichum,</i>
<i>Ginkgo biloba,</i>	<i>Tilia Americana,</i>
<i>Hicoria Pecan,</i>	<i>Tilia European,</i>
<i>Juglans Californica,</i>	<i>Ulmus Americana,</i>
<i>Juglans nigra,</i>	<i>Ulmus campestris,</i>
<i>Juglans Sieboldiana,</i>	<i>Ulmus racemosa.</i>

EVERGREEN

<i>Acacia melanoxylon,</i>	<i>Eucalyptus rufa,</i>
<i>Acacia mollissima,</i>	<i>Eucalyptus viminalis,</i>
<i>Arbutus Menziesii,</i>	<i>Ficus macrophylla,</i>
<i>Cinnamomum Camphora,</i>	<i>Olea Europaea,</i>
<i>Cryptomeria Japonica,</i>	<i>Pinus radiata,</i>
<i>Eucalyptus botryoides,</i>	<i>Quercus,</i>
<i>Eucalyptus calophylla,</i>	<i>Schinus molle,</i>
<i>Eucalyptus capitellata,</i>	<i>Sequoia gigantea,</i>
<i>Eucalyptus cornuta,</i>	<i>Sequoia sempervirens,</i>
<i>Eucalyptus diversicolor,</i>	<i>Sterculia diversifolia,</i>
<i>Eucalyptus leucoxylon,</i>	<i>Tristaniopsis conferta,</i>
<i>Eucalyptus rostrata,</i>	<i>Umbellularia Californica.</i>

Fence out pigs, we may—if we know how, and nobody leaves the gate open—but to fence out a genial eye from any corner of the earth which Nature has lovingly touched with that pencil which never repeats itself—to shut up a glen or a waterfall for one man's exclusive knowing and enjoying—to lock up trees and glades, shady paths and haunts along rivulets—it would be an embezzlement by one man of God's gift to all. A capitalist might as well curtain off a star, or have the monopoly of an hour. Doors may lock, but outdoors is a freehold to feet and eyes.

N. P. WILLIS,
“Out-doors at Idlewild.”

CHAPTER V

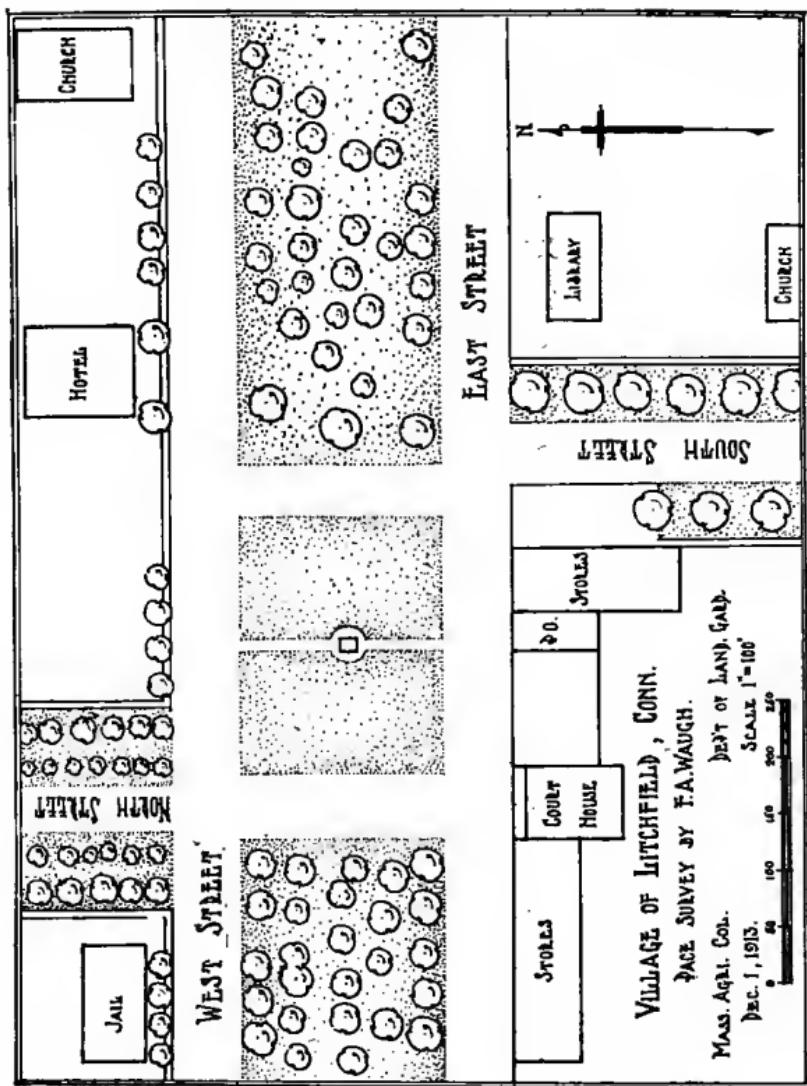
CIVIC CENTERS

IN modern city building, we hear a great deal about civic centers. The civic center is a concrete expression, in city building, of the modern genius for organization. It is the public effort toward efficient administration combined with a public exhibition of power and splendor. It is the imperialism of democracy.

In village and rural improvement, we hear less of civic centers. In the first place, rural improvement has not progressed so far as the science of city making. In the second place, there is not the same strong executive organization in the rural community as in the large city. In the third place, the village is not so much given to display of power.

Nevertheless, the civic center belongs to the rural community as well as to the city. It occupies the same place in village affairs that it should in city affairs. The village

RURAL IMPROVEMENT



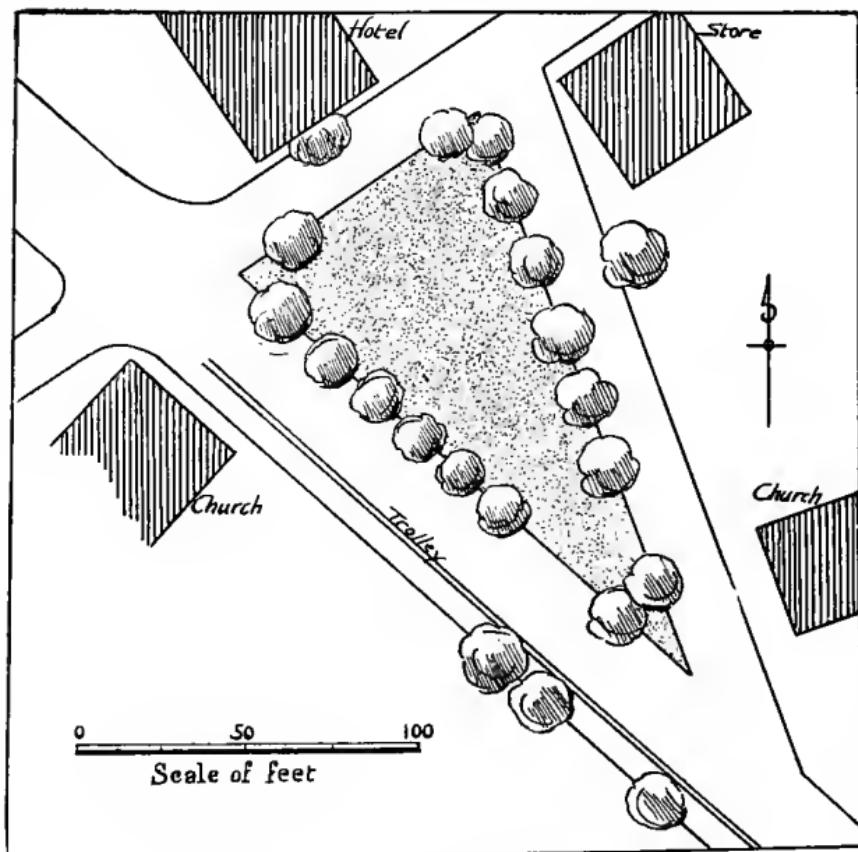
needs to take the same pride in itself which is manifest in the city. There should be the same exhibition of pride and patriotism. Relatively speaking, there will be the same gain in efficiency of administration.

Practically considered, the proposition for the development of a civic center in the village or country town means an aggregation in some central and suitable position of the public business and of the public buildings. The most important of these, viewed from our present standpoint, is the town hall. With this we may include the court house, town library or other local institutions. If the town possesses a separate public library, this can be the next most important building and the one most urgently to be desired at the civic center. The day will soon come, with or without the help of Mr. Carnegie, when every enterprising village in this country will have its public library. In many cases the library will have its separate building. It is reasonably to be expected that in a large percentage of cases the public library will be chaste and dignified

RURAL IMPROVEMENT

in design, a building expressing the sentiment and civic aspiration of the citizens. Such a building should be geographically central in the town, as it is central in the intellectual life of the community.

The post office, though representing the federal rather than the local government, is



ANOTHER VILLAGE CENTER IN MASSACHUSETTS

a public institution and peculiarly the property of all the people. In very many country towns it has developed naturally and through the force of circumstances to be the civic center. It is the forum where neighbors meet, where senators are elected and where horse trades are consummated. Here the notices of auctions are posted and the coming circus announced. Obviously the postoffice should be centrally located, and perhaps it is no more than right that the other public buildings should revolve around it.

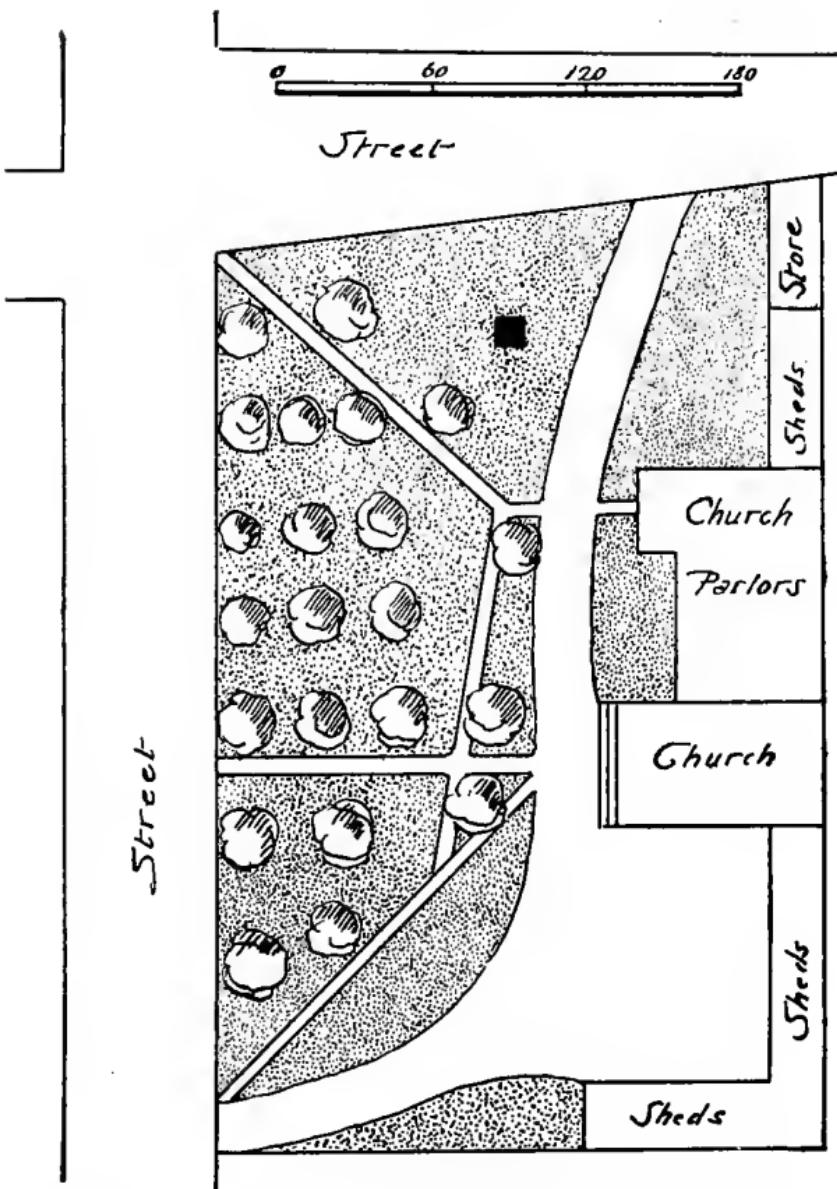
The greatest of public institutions in the small town (and, in fact, in the city as well) is the public school. Therefore the high school building, or the main school building, should occupy a place in that group of public structures which constitutes the civic center. When the public school buildings come to be used, as they certainly will be in the near future, for a great variety of public business, the propriety and the need of a very central location will at once be evident.

The next most important institution in the

RURAL IMPROVEMENT

community is, or ought to be, the church. There are many, indeed, who would be glad to name it as the institution of first importance. Looking the facts honestly in the face, however, we cannot claim too much for its influence and its position in public esteem. If the church could be a single institution, physically represented by a single beautiful edifice, the situation would be very different, both as regards spiritual influence and civic design. The church would then hold a more powerful place in the community, and it could command a more dignified setting in the community architecture. Unfortunately, even the most rural towns sometimes try to support a half dozen churches. A consequence is that no one of these organizations has any large influence in public affairs or can provide a church building which is a credit to the town. A half dozen mean and shabby structures would add nothing to the civic center, either physically or spiritually. On the other hand, when one or more churches have really achieved a sufficiently high

CIVIC CENTERS

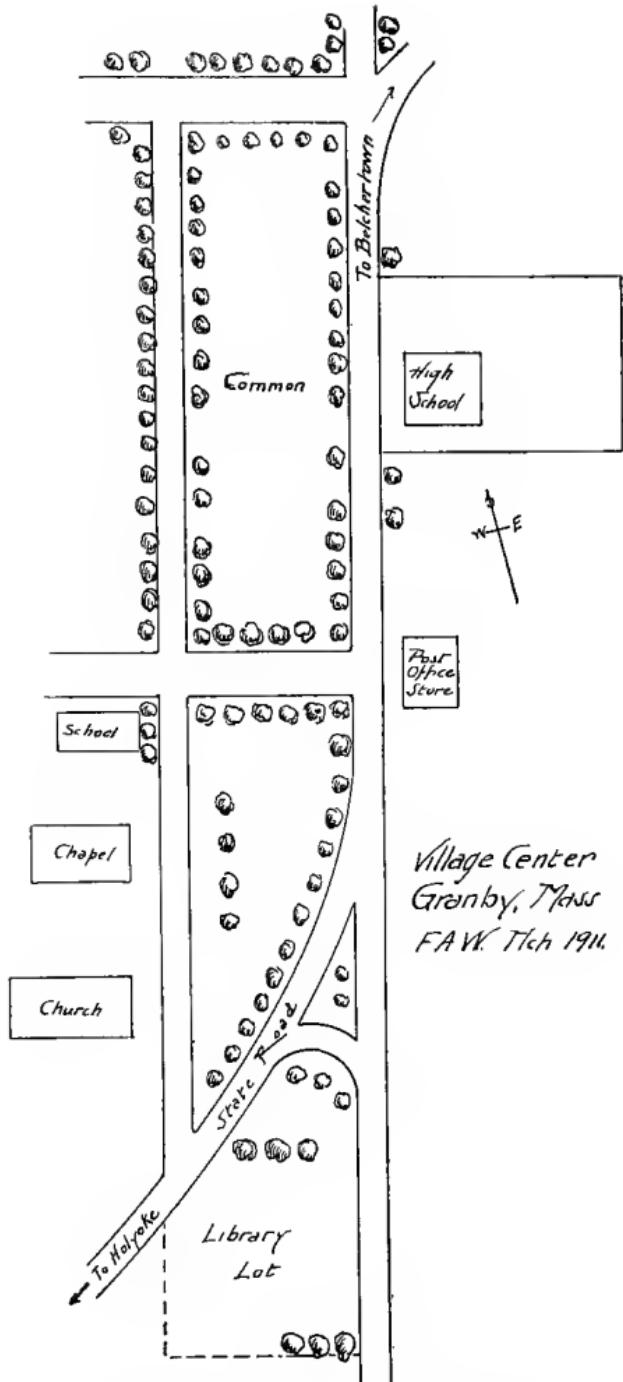


COMMON AND PUBLIC BUILDINGS, NORTH BROOKFIELD, MASS.

RURAL IMPROVEMENT

standing in town so as to represent the sentiment of the people in an important degree and so as to be able to build really suitable buildings, then those church buildings belong to the public and will be placed, with the other public buildings, at the center of the town.

Nothing could be finer, from the standpoint of civic design, nor as representing the civic life of a community, than the large, beautiful, dignified (usually Congregational or Unitarian) church, fronting on the town commons in many New England villages. These come the nearest to representing the ideals, both of civic design and church influence, of anything we have ever seen in America. Of course in many European villages, where the citizens are all adherents of a single confessional, the case is equally good. Here the church naturally and properly becomes the physical, intellectual and spiritual center of the village. As one sees such a town from a distance, it is beautifully dominated by its own church. It is greatly to be hoped that the follies and



DESIGN FOR A SIMPLE CIVIC CENTER

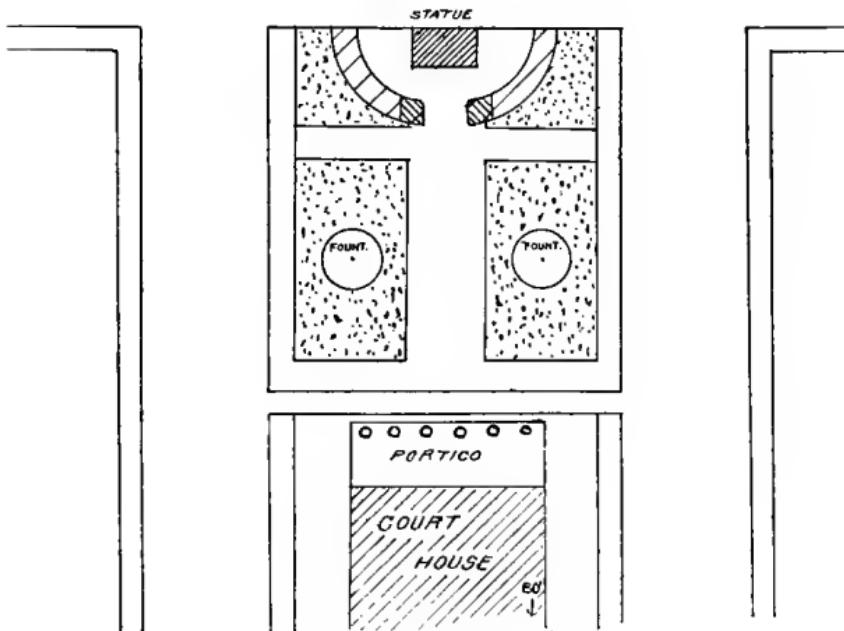
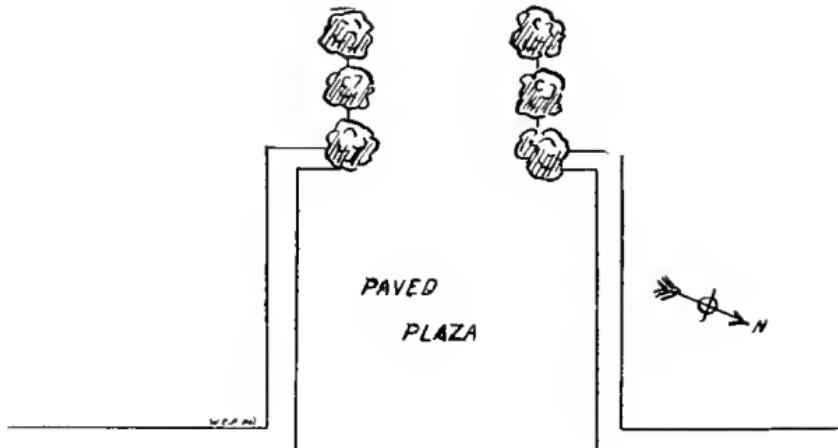
RURAL IMPROVEMENT

abuses of sectarianism and church division in this country will be greatly abated in the future. Some slight progress seems to be making in that direction, but it is altogether too slow.

In certain towns and villages there are other public or semi-public institutions which ought to be reckoned as part of the central group, which we here call the civic center. One of the most appropriate of these is the grange hall, which one finds in many towns in the New England states. This, in fact, often becomes the center of the center, the principal place of communal interest.

The following buildings and institutions should therefore be considered as belonging essentially to the civic center: 1, the town hall or court house; 2, the public library; 3, the high school or main school building; 4, the church or principal churches; 5, other public institutions and buildings, as the grange hall.

The arrangement which is given these buildings is of the greatest importance.



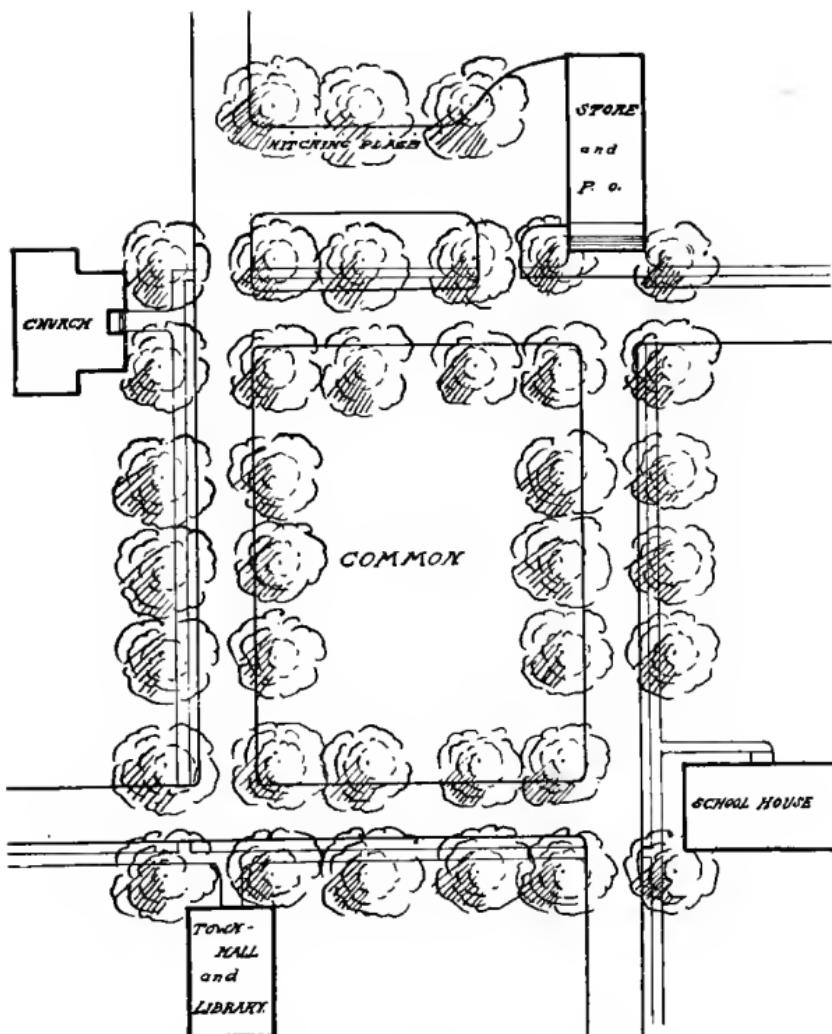
CIVIC CENTER, BELLEFONTE, PA.

RURAL IMPROVEMENT

They should, first of all, be central, a fact that should be sufficiently obvious. They should be placed in a single group, reasonably near together, and not separated by private buildings, especially those of no consequence. Placing the buildings close together in this manner facilitates the transaction of public business; and what is much more important, it gives the public works of the town a much more effective setting. The buildings are massed in such a way as to make a proper show of the life and resources of the town. They contribute more effectively to civic pride and serve as reasonable advertisements of the thrift and resources of the community. Just as a good farmer takes pride in a big and imposing-looking house, so the whole town takes pride in the imposing array of beautiful, appropriate and useful public buildings.

Undoubtedly the best arrangement for such a series of buildings is to be found in placing them about the central public square. In many New England villages these buildings naturally gravitate to the

CIVIC CENTERS

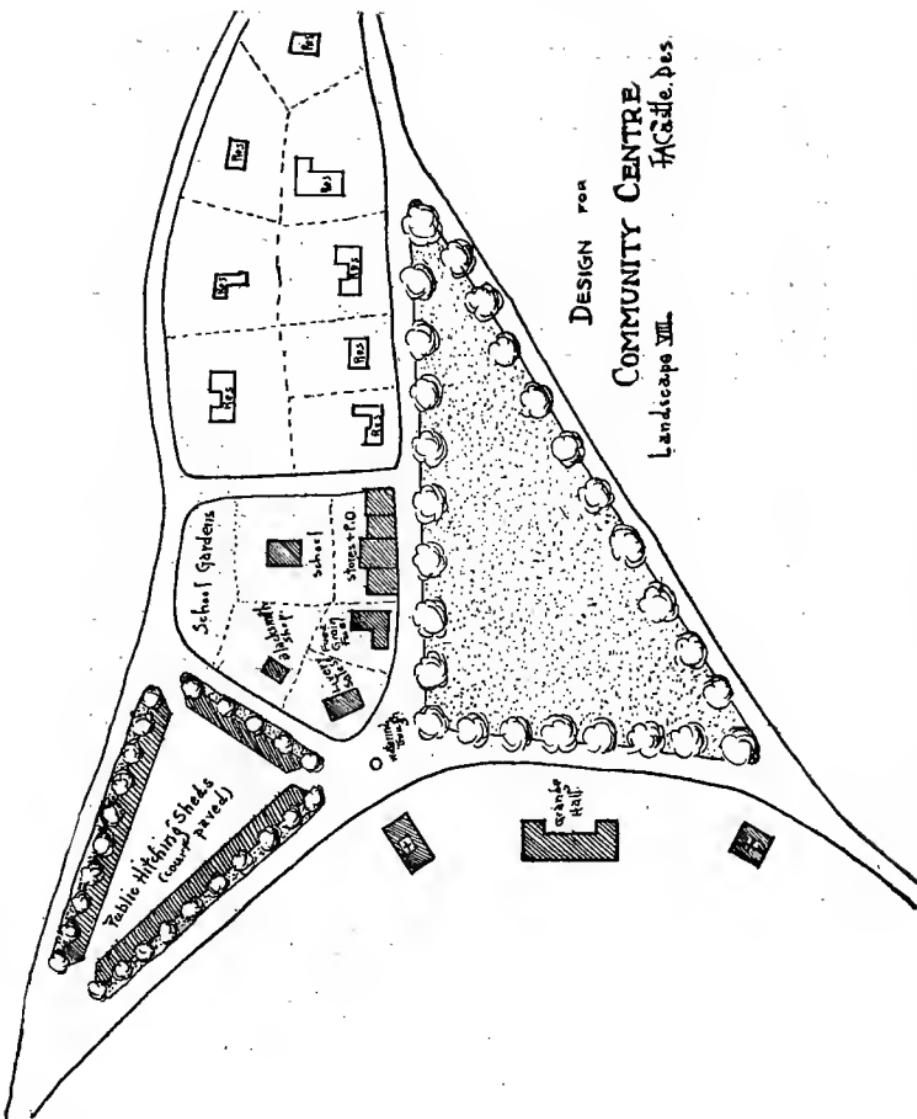


DESIGN FOR A SIMPLE CIVIC CENTER

RURAL IMPROVEMENT

town common. As a matter of fact, the common ought to represent a larger area, while the public square, as a civic center, should have an entirely different character. The meaning and design of the town common are more fully discussed elsewhere. In many of the New England towns referred to, however, the so-called town common is a small village square which comprises the civic center, which we now have under consideration. While this arrangement is less frequent in western towns than in New England, it is by no means unknown. I recall the fact that Lyons, Kansas, for example, has designed a central block, in which the court house is located. The original design for McPherson, Kansas, provided for two blocks on the west side of the town for public buildings belonging to the county, and two blocks on the eastern side of the town for public buildings belonging to the city. While the arrangement might have been improved by grouping the county and city buildings together, this, nevertheless, is a recognition of the correct principle.

DESIGN FOR
COMMUNITY CENTRE
Landscape VIII.
F. G. G. des.



In many small towns the civic center has been practically made by placing the principal buildings at, or near, the central cross-roads or four corners. If the center of the village is represented by such a crossroads, it is perfectly natural, and therefore to a certain extent good design, to place public buildings there. A town hall may stand on one corner, and if the grocery store occupies the second corner, as it usually does, no great violence is done to the body or the spirit of the civic center. If a clean and dignified public hostelry should appropriate the fourth corner, the result would be almost all that could be desired, so far as the collection of buildings is concerned.

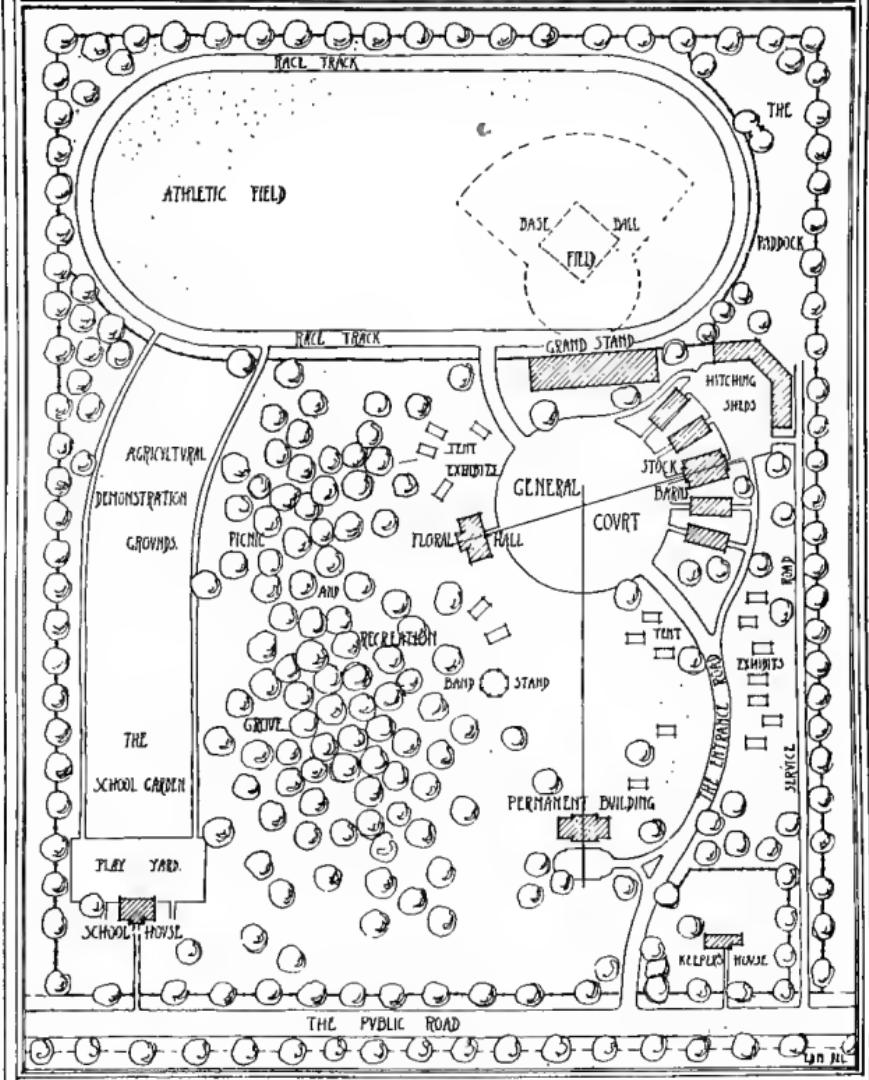
The main defect in this arrangement of public buildings on the central four corners is that the buildings themselves do not show to the best advantage. Any church, town hall or school building can be seen more effectively if placed so as to face upon an open common, or if placed at the head of an open street. The latter arrangement, of

A RURAL COMMUNITY CENTRE

THE PLAN DONE BY ~
THE LANDSCAPE ART DEPT.
NY STATE COLL. OF AGRICULTURE

APPROX. SCALE 100 FT. X 110 FT.
CORNELL UNIVERSITY - DECEMBER-1912

F-R THE
COLLEGE OF AGRICULTURE.



A SUGGESTION FROM CORNELL UNIVERSITY

RURAL IMPROVEMENT

course, supplies no opportunity for the grouping of several public buildings.

Finally, the public buildings may be placed along both sides of a straight or curving street. This is the least satisfactory arrangement of all, though, of course, it is better than having the buildings scattered all over the town. At any rate, it brings them into close proximity and secures the advantage of administrative efficiency. It makes public business easier, though it does not give the buildings the beauty of effect which is so much to be desired.

In the most rural of rural communities there are still civic centers, and these might greatly develop. I well remember my early days on the sparsely inhabited plains of Kansas, and I can vividly recall the various social activities which centered at the district schoolhouse. There used to be church and Sunday-school sessions at the schoolhouse on Sundays. The evenings were occupied with literary societies, debating clubs and revival meetings. If there were any political meetings they were also held



TOWN HALL FROM THE COMMON, AMHERST, MASS.

at the schoolhouse. The boys used to meet there sometimes on Saturday afternoons for a match game of ball (and, I may also say, sometimes on Sunday afternoons). In fact, every kind of public meeting was held at the schoolhouse. This seems to me to represent an almost perfect social organization and, so far as it went, a perfect social equipment.

At the present time the more advanced country districts are providing a more elaborate equipment for the more advanced and enriched society life. Neighborhood centers are being established in some places. These, of course, are merely civic centers under another name. They usually combine the high school house with a library and playground or some similar equipment. This idea is capable of very large extension in all progressive communities in the near future.

Most of the wild plant wealth of the East also has vanished—gone into dusty history. Only vestiges of its glorious prairie and woodland wealth remain to bless humanity in boggy, rocky, unplowable places. Fortunately, some of these are purely wild, and go far to keep Nature's love visible. White water lilies, with rootstocks deep and safe in mud, still send up every summer a Milky Way of starry, fragrant flowers around a thousand lakes, and many a tuft of wild grass waves its panicles on mossy rocks, beyond reach of trampling feet, in company with saxifrages, bluebells, and ferns. Even in the midst of farmers' fields, precious sphagnum bogs, too soft for the feet of cattle, are preserved with their charming plants unchanged—Chiogenes, Andromeda, Kalmia, Linnæa, Arethusa, etc. Calypso borealis still hides in the arbor vitæ swamps of Canada, and away to the southward there are a few unspoiled swamps, big ones, where miasma, snakes, and alligators, like guardian angels, defend their treasures and keep them as pure as paradise. And beside a' that and a' that, the East is blessed with good winters and blossoming clouds that shed white flowers over all the land, covering every scar and making the saddest landscape divine at least once a year.

JOHN MUIR,

"Our National Parks."

CHAPTER VI

PUBLIC GROUNDS

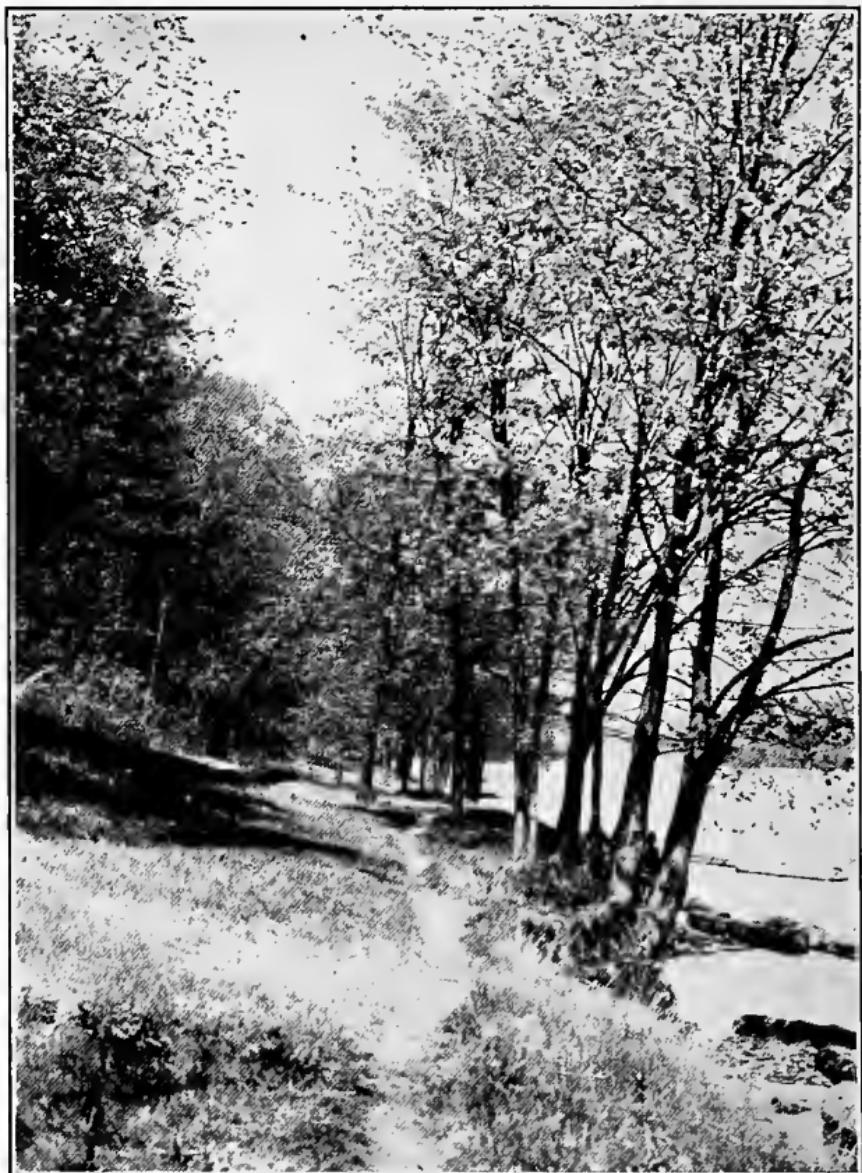
THE development of public parks, playgrounds and boulevards and their organization into efficient park systems has come to be recognized as an important part of city improvement. The improvement of a rural community requires similar lines of development. This has generally not been recognized. It has been a common assumption that the country needs no parks, and that its boulevard system is sufficiently represented by a neglected network of country roads.

The following types of public grounds or reservations are to be considered in a general scheme of rural betterment: (a) National parks, (b) state parks, (c) local scenery reservations and roads, (d) school grounds, (e) cemeteries and church grounds, (f) town commons, (g) playgrounds. Let us

RURAL IMPROVEMENT

look at each of these questions to see what is the nature of the problem.

The national parks are destined to play a very important role in the future development of America. If we look at civic art from the national standpoint, they are of prime importance. These national parks should be established in various parts of the country, their location being determined primarily by the desire to preserve spots of national historic importance, or with the intention of preserving typical examples of natural scenery or special more or less spectacular features of national importance. The Yellowstone Park in Wyoming is a fine exemplification of this idea. Niagara Falls and its environs ought to become a great national (really international) park, and this again illustrates the idea distinctly. The battleground reservations at Gettysburg and Lookout Mountain give examples of areas reserved on account of their historic interest. Should we secure an adequate park reservation in the White Mountains or in the Adirondacks under federal



A PLEASANT PUBLIC PLAYGROUND ON A LAKE SHORE

control, this would be an example of a park in which would be preserved fine types of natural scenery. However, we ought to present in the same way the equally beautiful scenery of the sea coast dunes, of the great interior prairies and of the arid deserts. All these scenery types are beautiful, valuable and highly important. They cannot be permanently kept for succeeding generations in America unless they are appropriated by the national government and administered in behalf of the whole people. The time should never come when the people of the United States cannot have access to the great and beautiful landscapes which make America what it is today.

Other and similar reservations, however, are needed under state control. There are many spots of natural beauty, many types of fine native scenery, many places of historic interest in every state, which are especially valuable to the state itself. Though these should all be preserved, they may not be of such national importance as to justify the federal government in patronizing them.

RURAL IMPROVEMENT

Several of the states are now definitely entered upon this program of developing state parks. The work has usually been begun on quite the proper theory, as we have stated it here.



RIVER BANK RESERVED FOR PUBLIC RECREATION

Besides this, however, even the local community has similar opportunities. The smallest and poorest town has also its spots of historic interest, its types of beautiful scenery, its picnic grounds, its lakes and

hills, which should not be allowed to pass into private control. Rather should they be acquired by the public and kept open to all the citizens of the town. This is a matter of great consequence which is being widely neglected. There is hardly a town in the country, in fact, where the people have taken reasonable precautions to own their own lakes or even to have access to them. I recently visited a country town where they boasted of a beautiful lake covering 100 acres. They were very proud of it. They used it for boating parties, for fishing, for skating and the boys went swimming there. On investigation, it proved that the town did not own a single foot of the shore, and that aside from a few private owners, nobody could reach the lake legally except to fall into it out of a balloon. All the boys who went swimming or fishing, all the boating parties, and all the skating parties, used the lake only by trespassing on private land. These private owners were constantly making new restrictions, so that, without some action, in the near future the lake would

RURAL IMPROVEMENT

become practically useless to the community. At the present time it would be easy for this town to acquire the title to a considerable portion of the lake shore at a very moderate expense, and such a course is altogether wise. Indeed no other course is excusable.

This actual example is only one of thousands which might be given showing what the important and very urgent need is in most country places. During the last few years I have visited more than a hundred rural communities, and have examined the situation in detail with reference to the general questions of civic betterment, and I have found this particular problem with this particular opportunity most frequently present, and most conspicuously neglected.

The items most communities need to look after in this way are: (a) Ponds and lakes, which ought either to be owned in toto, or should be accessible through the ownership of shore properties; (b) river shores, (c) mountain tops or hills commanding especially good scenery, (d) small streams,



WOODLAND USED FOR PUBLIC RECREATION—A MUNICIPAL FOREST IN GERMANY

brooks and water falls, (e) rocky glens, caves, etc.

Very often special pieces of scenery can best be opened up and made available by establishing scenic drives or roadways. This will be particularly the case along river banks and lake shores. It is by no means necessary that such a scenic roadway should lead to any particular point. In fact, it is better not to have it so. If the roadway is a convenient highway for traffic it will soon be taken up with heavy hauling, or infested with automobiles. If it is inconvenient for such traffic it will be left as it should be to the pleasure seekers. It will be a comfortable drive for Sunday afternoon. It will be a resource of pleasure and beauty in the town, and this is precisely what progressive towns ought to provide for.

All the school grounds in the country need attention. There has never been reported a case of one which was too highly improved. Everywhere school grounds need to be cleaned up and made more orderly. This is the most fundamental and

RURAL IMPROVEMENT

the most far-reaching and the most important improvement which can be suggested in this field. As a rule school grounds ought to be larger everywhere, and this statement applies most emphatically to country school grounds. It is a matter of sorrow that in the country, where land is cheap, school grounds should be pinched in size and the pupils crowded into the public streets.

Many progressive communities throughout the country have taken steps to correct this evil. Country schools are being provided with commodious grounds. On these grounds are being developed some of the enterprises which should center around a school. There are school gardens, sometimes fruit trees, sometimes experimental grounds, sometimes adequate playgrounds. Occasionally at such points there are developed rural civic centers. A rural civic center should include a public meeting hall, which may or may not be separate from the school building; it should include a local library, if the community is the fortunate possessor of such an institution; it may very



RIVER FRONT IMPROVED FOR PUBLIC RECREATION IN A GERMAN VILLAGE

PUBLIC GROUNDS

properly include a grange hall; and the rural church should meet on this ground with the other institutions of the rural community. In this physical co-operation they can begin a larger organization of harmonious association which will help them develop the community as it ought to be developed.

Much has been said about the ornamentation of school grounds, about how to lay off walks, where to plant shrubbery, how to grow flower beds, and other things of like character. All this is good work and well worth doing, but it will follow as a matter of course when the whole scheme is rightly organized. It represents a detail and not the main principle. As a rule, rural improvement begins at the wrong end, when the first undertaking is to plant a flower bed on the school grounds.

Cemeteries everywhere are notoriously neglected. This is especially so in rural districts. It is by no means uncommon in older sections of the country to come upon a forgotten cemetery, overgrown with

RURAL IMPROVEMENT

bushes and trees. Even in the new prairie states there are thousands of cemeteries given up to sunflowers and ragweeds. A progressive and self-respecting community would hardly allow such conditions to exist; and when the local improvement society lays out its program of work, cemetery improvement will be naturally one of the earliest undertakings. The thing to be done is sufficiently plain and simple. The grounds are to be cleaned up and put in good order. Weeds and brush are to be removed, and in their places grass and trees are to be encouraged. Head stones are to be straightened up, walks to be marked out and a general condition of order and cleanliness substituted for the present state of disorder and slovenliness.

In olden times cemeteries existed as a part of the church grounds, and such an arrangement is still to be found in some places. In other places church grounds exist separately. Plainly that tract of land belonging to the church should be kept in repair. Two old sayings may be borne in mind: "Order

is heaven's first law" and "Cleanliness is next to godliness." Let order and cleanliness prevail and the church has, in its physical aspect, opened the way to its higher work.

The finest feature in many a New England town is the town common. It is strange that so fine an element in town planning should not have been kept up more carefully in the more ambitious, though less attractive towns, founded farther west by the emigrants from New England. Every town which possesses a central common has an asset of priceless value. It is one which should be guarded at every point and at all costs. Nothing should be allowed to encroach upon it under any circumstances. Public-spirited citizens should strenuously resist every effort to place public buildings upon it, and even the habit of placing a memorial monument, band stands, fountains and other alleged ornaments on the town common should be strictly discountenanced. Such property should be kept strictly open except for its shade trees. Even flower

RURAL IMPROVEMENT

beds are a doubtful improvement in most instances.

Those towns which do not have central parks or commons should let pass no oppor-



AN OLD SUGAR BUSH ADMIRABLY SUITED TO BE A RURAL PICNIC GROUND

tunity for creating them. Sometimes a wise plan, undertaken with sufficient forethought and followed out with sufficient patience, will secure a piece of property which will serve this purpose.

Whether the local community has or is able to secure a central common, or not, it will be found good sound public policy to hold the ownership of other outlying tracts, especially picnic grounds, or pieces of property which the community is likely to need for the common use of its citizens. This is hardly the place to introduce the discussion of public ownership of profit-earning properties; but it may be pointed out that many communities in various parts of the world have had very happy experiences in the ownership and operation of such lands. A considerable number of Swiss and German towns own public forests, and while these add enormously to the beauty and attractiveness of these several localities, they return at the same time substantial revenues. There are a number of towns and cities in Germany and Switzerland where the entire expenses of government are borne by these public forests.

One of the most common deficiencies in the country communities is the lack of playgrounds. There is no place in America

RURAL IMPROVEMENT

where boys do not play ball, and yet there is hardly one town in a thousand where any public provision is made for this and similar games. The consequence is that the boys play in the streets or upon private property. Playing in the streets is dangerous to the players and to the public, and playing upon private property is trespass. Boys who play ball in the street or who trespass upon private property for this purpose have taken the first long step toward robbing the neighboring orchards. From robbing orchards they easily pass to more ambitious depredations and so on to downright felony or plain political graft. There is, in fact, no reasonable excuse of any sort which can be given by any village or rural community for not owning a public ball ground. Provision should be made for other sports besides baseball. One reason why country life in the past has been less attractive than city life is just this, that no attention has been paid to such legitimate sports. If some pains could be taken to promote baseball, football, hockey, basket ball and all similar

PUBLIC GROUNDS

recreations in country neighborhoods, it would go a long way toward solving more important economic and social problems.

The seuerall situations of mens dwellings, are for the most part vnauoideable and vnremoueable; for most men cannot appoint forth such a manner of situation for their dwelling, as is most fit to auoide all the inconueniences of winde and weather, but must bee content with such as the place will afford them; yet all men doe well know, that some situations are more excellent than others: according therfore to the seuerall situation of mens dwellings, so are the situations of their gardens also for the most part. And although diuers doe diuersly preferre their owne seuerall places which they haue chosen, or wherein they dwell; As some those places that are neare unto a riuier or brooke to be best for the pleasantnesse of the water, the ease of transportation of themselves, their friends and goods, as also for the fertility of the soyle, which is seldom bad neare unto a riuers side; And others extoll the side or top of an hill, bee it small or great, for the prospects sake; and againe, some the plaine or champion ground, for the euene leuell thereof: euery one of which, as they haue their commodities accompany-

ing them, so haue they also their discommodities belonging vnto them, according to the Latine Prouerbe, Omne commodum fert suum incomodum.

JOHN PARKISON,

“Paradisi in Sole Paradisus Terrestris.”

Old New England villages and small towns and well-kept New England farms had universally a simple and pleasing form of garden called the front yard or front dooryard. . . . This front yard was an English fashion derived from the forecourt so strongly advised by Gervayse Markham, and found in front of many a yeoman's house. . . . The front yard was sacred to the best beloved garden flowers and was preserved by fences from the inroads of cattle.

MRS. ALICE MORSE EARLE,

“Old Time Gardens.”

CHAPTER VII

THE VILLAGE HOME GARDEN

THE treatment of the home grounds has ever been the most popular problem in American landscape gardening. How to lay off the home grounds has been the theme and sometimes the title of a clear majority of all American books on landscape architecture. Advice is asked more frequently on these matters than on the big problems of city design, park administration, state reservations and other great works which landscape architects themselves prefer to undertake.

The importance of these problems of home grounds improvement cannot be overlooked. This is one of the largest factors in general civic betterment. When the proud citizen is visited by his cousin or his long-lost sister from Arkansas or Montana, his greatest delight is to show off his home

THE VILLAGE HOME GARDEN

town. This he does driving up and down the best streets and pointing out the most attractive places. "There is where Colonel Jones lives," says the proud citizen. "There is where Mr. Brown, our member of the



HOME AND GARDEN FROM THE STREET—AN INVITING GLIMPSE

legislature, lives." "There is where Mary Muggins lives, who wrote the famous novel." Thus does every citizen praise his own town by pointing out the most attractive homes, and thus does every private place become public property. We all own

an important share in it. Its good looks are the pride of the town. Its shabbiness and neglect are a public shame. A vigorous campaign should be undertaken to clean and beautify all private grounds for the public benefit.

The American taste for developing private grounds is unique. Nowhere else in the world are the same principles followed. In the old country the theory is that a man's home grounds are his private possession, to be kept as secluded as possible. In this country the theory is that every house lot is a public possession, to be shown off to the best advantage. Americans always speak of the development of the front yard, sometimes allowing the back yard to be nothing but a rubbish dump. Doubtless there is some good in both theories. We have already spoken of the public ownership and enjoyment of private grounds; and the wish of every American citizen to make his premises look pleasing from the street is sound and wholesome. At the same time a man's private garden should be his per-

THE VILLAGE HOME GARDEN

sonal possession to some extent. This sentiment, moreover, is gaining ground in this country. There are more people who want to live out-of-doors, who want an opportu-



VILLAGE HOUSE AND FRONT YARD

nity to play with their own children or eat supper with the family in the garden, out-of-doors and yet with privacy.

Now, the way in which this division is made largely determines the treatment of

the whole garden. The American plan requires the development of a large front yard. The English and German plan requires an inclosed rear yard which is developed to be a real garden. The American plan requires the house set fairly well back from the street; the European plan requires the house set close to the street. On grounds of moderate size, or larger, it is possible to accomplish both things. There may be an attractive front yard, published to the attention of the world, and then a private garden separated from this by a hedge or screen, forming a sequestered range for the family.

Aside from this question of privacy versus publicity, the design of the grounds should be determined first in relation to the main factors. If there is to be a vegetable garden, it should be given its separate and suitable area. If there is to be a dwarf fruit garden, the proper space should be appropriated. If there are to be fruit trees they should be given room. If there are to be a chicken yard and paddock for the horse or a garage, the necessary space should be definitely set

aside. If members of the family are fond of growing flowers, it will be much better to provide a definite cultivated area for them, presumably at the rear of the grounds, rather than to mix the flower-growing experiments with the orchard growing or the front yard. If there are croquet grounds, tennis courts or similar equipments for family recreation, they should be properly located before the remaining details of the design are planned. It is a very sad and a very common mistake to leave such questions as these until the grounds have been planted. After everything is done then someone suddenly brings in the demand for a tennis court, which has to be laid off in an unsuitable space, seriously infringing on lawns and flower beds already established.

After the main feature of the grounds like those enumerated have been definitely settled, the ornamental design proper may be taken up with reasonable hope of a fair issue. This problem, however, is not one of ornamentation. It is, instead, primarily a question of order versus disorder. The most

orderly place is the one that is best designed. This is why the simple and intelligible order of the formal garden is so likely to please.

Now, the first principle, and the most important one, in garden design is simplicity.



MASSES OF LILACS AND WILLOWS ADORNING AN OLD HOUSE

Simplicity is the queen of garden virtues. The prominence of this virtue is peculiarly visible in dealing with home grounds. Unfortunately, simplicity is one of the rarest accomplishments everywhere, and more

rare in gardening than in ordinary life generally.

There are a few recurring features in home grounds design which must everywhere be guarded against. The first of these is making collections of plants. All sorts of strange things are bought from the florist, from the tree agent, from the catalog and even from the department stores, and are jumbled together all over the front yard. Many of these things are unsuitable to the place. They are usually inharmonious, they disagree with one another and with the house, and the grounds are merely cluttered up with horticultural rubbish. The results are exactly the same as occur in house furnishing when the mistress gets the fad for collecting furniture and bric-a-brac.

The results are especially bad when the horticultural collector has a taste for freaks. Then he buys Camperdown elms, cemetery birches, variegated weigelas, yellow-leaved poplars, red-leaved *Prunus Pissardi*. Crippled and weeping specimens are particularly recherche and particularly vulgar.

RURAL IMPROVEMENT

Along with these horticultural freaks one commonly finds such curiosities as leaky boats sailing across the lawn, full-freighted with brilliant nasturtiums, disused camp kettles on rustic tripods and boiling over with red geraniums, leaky boilers elevated



COMBINATION OF STREET PLANTING AND HOME ADORNMENT

on gas pipes doing service as garden boxes, whitewashed rockeries and beautiful flower beds edged with inverted soda-pop bottles. It ought not to be necessary to condemn such things, but the frequency with which they occur shows that the improvement campaign has something to meet in this respect.

THE VILLAGE HOME GARDEN

A fair question to be raised in garden design for home grounds is whether a formal or a natural style should be preferred. Each style has its devotees and its advantages. It is foolish to condemn either style. As a rule, however, the former style should not be presented in the front yard. It should be used in an inclosed garden, which means the private garden of the rear premises. In small inclosed yards the formal method of treatment is the easiest and apt to be the most effective from the standpoint of design.

When the grounds, or any part of them, are to be developed in the natural style the main requirement is to have plain and open lawn. Special effort should be made to secure spacious areas of good grass growing on nicely graded land. The land should either be practically level or should show the most pleasing curves possible. Very few people appreciate how much beauty can be secured in the contours of the land itself.

In order to secure such spacious and open lawns, the plantings should be pushed back

to the margins. It is an almost fixed rule that planting in the natural style the trees, shrubs and flowers should be placed in masses along the outer margins. These margins should be irregular, retreating here, advancing there, giving heavy masses alternating with light feathery screens, letting in the sunlight in one part, throwing heavy shadows in another. Great skill can be used in developing such setting to the very highest effectiveness; yet an amateur will hardly make serious mistakes if some thought and patience are given to the work.

Having disposed of the general design, we may now consider the planting. The first caution is not to overplant. Still, many persons make the mistake of planting too meagerly. The rule of professional landscape gardeners is a good one. It is "Plant thick, thin quick." This is poor grammar but good horticulture. If the young shrubs and trees are set close together they help one another. The moment they begin to grow, however, the poorest ones must be thinned out to make room for those which are to re-



SPRING TIME IN THE PRIVACY OF THE HOME GARDEN

main permanently. This method of developing grounds has an additional advantage in that it gives complete effects from the first year of planting.

The next point to be observed is to use hardy stuff. Plants which will not withstand the climate in which they are placed may be very rare and curious, but it is bad policy to use them. The superior value of thoroughly hardy plants is fully recognized in America at the present time.

This desire for hardy materials has led to the addition of another rule; namely, that we should always use native stuff. Where specifically naturalistic effects are aimed at, especially where the backgrounds of the landscape are brought into the design, the use of strictly natural stuff is wholly to be justified. On the other hand, in small home gardens there is seldom reason in employing such an arbitrary rule. There are many splendid plants from Europe and Asia which are hardy and should be freely used. What could we do, for instance, without Japanese barberries and European lilacs?

RURAL IMPROVEMENT

When thoroughly hardy plants are chosen for a garden we are apt to give a preponderating allowance of shrubs and perennial herbs. Now hardy shrubs and perennials are desirable for still other reasons; and so we have developed a sort of general preference for this class of materials. They should usually be the principal reliance in garden making.

A person who makes a garden should expect to plant something every year. The idea of making a garden now and keeping it without alteration forever is founded on a series of misapprehensions. The planting of new things every spring is a large part of the enjoyment of a garden. Furthermore, there are improvements to be made even in the best planted gardens.

Every garden needs care. No matter how perfectly it is made it needs constant looking after. Weeds have to be kept out, trees and shrubs pruned and lawns mowed. A great part of the attractiveness of every garden is secured at this very point. A well-kept garden is a good one, even if the design



THE APPLE TREE IS UNSURPASSED FOR ORNAMENTAL PLANTING

THE VILLAGE HOME GARDEN

be poor; a neglected garden is a bad one, no matter if it were laid off by the best landscape architect living. A large part of the garden work is merely maintenance.

How are these things to be promoted in a civic betterment campaign? Perhaps the simplest and the best method is to arouse enthusiasm and distribute knowledge through the schools. If school teachers are proficient in these lines, if they develop school gardens and if they do still better by developing home garden movements, then a community is in the possession of a working force capable of great good.

Wherever an active village improvement society exists such a society ought to undertake, as a part of its work, to promote good taste and enthusiasm in the development of home grounds. This can be done by bringing into the community good lecturers on such subjects and by placing in the local library suitable books. A village improvement society can also take up any of the work of the regular horticultural society like that mentioned below. Where a

RURAL IMPROVEMENT

woman's club acts as the agent of the community betterment it can do the same work. In some parts of the country, notably in the Province of Ontario, Canada, there are many local horticultural societies. These societies hold stated and special meetings, at which all questions of gardening, tree planting, flower growing and such improvements are discussed. Such societies also hold flower shows, fruit shows, and special fairs. They also organize gardening contests, which are particularly helpful in promoting village improvement along these lines. In such garden contests the various home grounds are visited by committees of experts, who make suggestions, give instructions and point out the best results. As a matter of fact, all these methods of arousing enthusiasm and organizing and attracting interest in the home grounds are capable of easy application and the results are likely to be altogether good. The only absolutely essential thing is the leadership of a few sensible men or women.

Les conditions d'un ordre plus specialement material qui doivent etre considerees dans le choix d'une residence rurale,—soit dans son ensemble, c'est-a-dire avec une exploitation agricole ou forestiere, soit au point de vue plus restriant du parc ou du jardin, sont principalement les suivantes: (1) *le paysage environnant, (2) l' altitude et la facilite d' acces, (3) le climat et l' orientation, (4) la forme et la nature du sol, (5) les abris, les arbres, et les vues, (6) les eaux, (7) les constructions, (8) les ornements pittoresques, (9) les ressources financieres.*

ED. ANDRE.
“L’ Art des Jardins.”

Men do usually covet great quantities of Land; yet cannot mannage a little well. There were amongst the Auncient Romans some appointed to see that men did till their Lands as they should do, and if they did not, to punish them as Enemies to the Publique; perhaps such a law might not be amisse with us, for without question the Publique suffereth much, by private mens negligence; I therefore wish men to take Columell's Councell; which is, Laudato ingentia Rura, Exiguum Colito. For melior est culta exiguitas etc. as another saith, or as we say in English, A litt'l Farme well tilled, is to be preferred.

SAMUEL HARTLIB'S
"Legacie."

CHAPTER VIII

FARM PLANNING

IN any scheme of rural improvement great emphasis must be placed on the development of individual farms. If each farm is clean, tidy, well kept, with a thrifty and home-like air, then the whole neighborhood will be attractive to visitors and satisfying to residents. To say of any valley that it is a district of fertile and well-kept farms is to picture it before the human imagination in the most engaging language possible. Those railway companies and state boards of agriculture which have given prizes for the best kept farms in certain districts have been promoting a very practical form of rural progress.

Let us consider the farm, therefore, as a unit, to see what can be done for its better organization, convenient administration, and for the atmosphere of beauty and comfort which ought to characterize it.

RURAL IMPROVEMENT

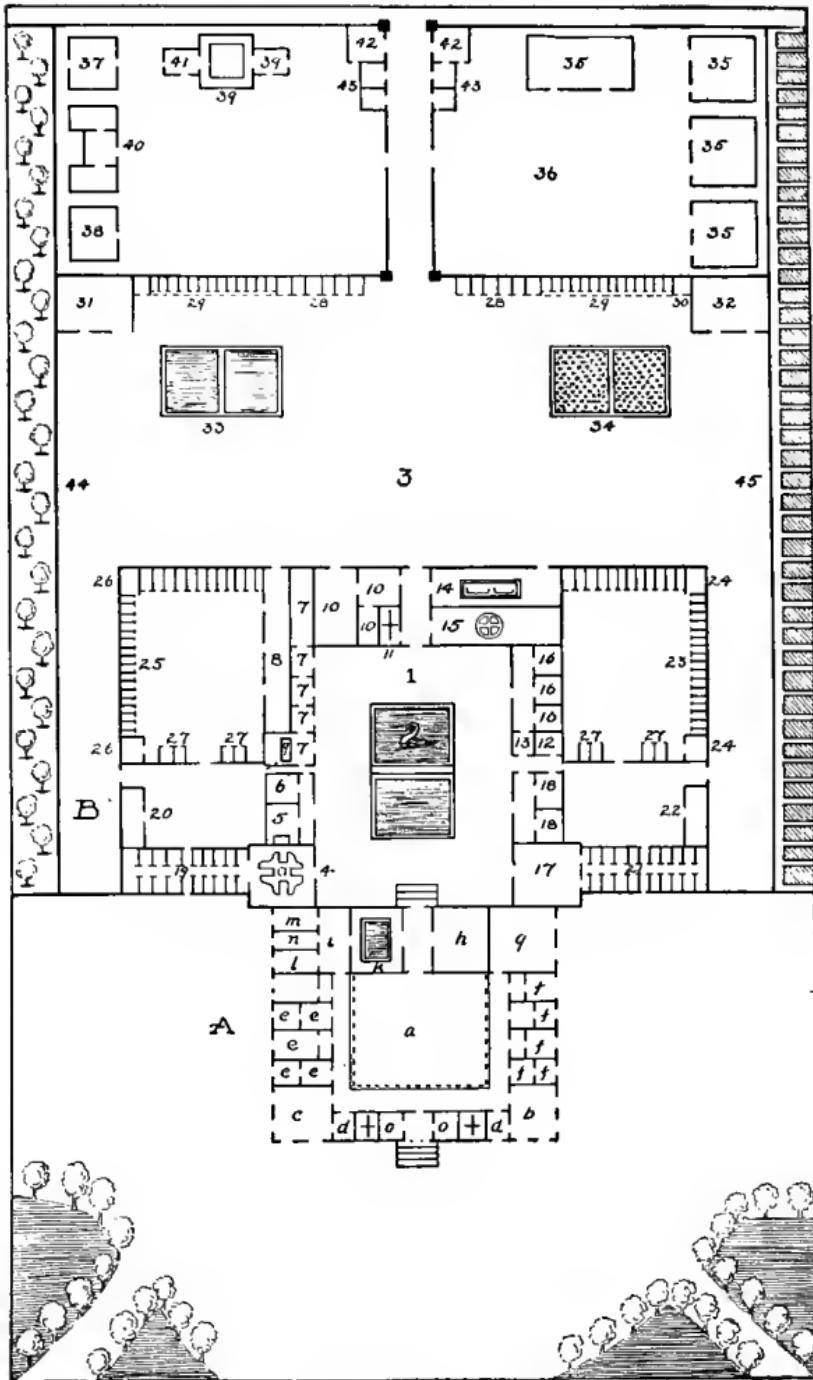
PLAN OF A ROMAN FARM LAYOUT TAKEN FROM "WET DAYS AT EDGEWOOD."

A. THE FARMHOUSE

- | | |
|-----------------------|---------------------------|
| a Inner court. | h Servants' hall. |
| b Summer dining room. | i Dressing room of baths. |
| c Winter dining room. | k Bathing room. |
| d Withdrawing rooms. | l Warm cell. |
| e Winter apartments. | m Sweating room. |
| f Summer apartments. | n Furnace. |
| g Library. | o Porters' lodges. |

B. FARM BUILDINGS AND CONNECTIONS

- | | |
|------------------------------|---------------------|
| 1 Inner farmyard. | 23 Sheepfold. |
| 2 Pond. | 24 Shepherds. |
| 3 Outer yard. | 25 Goat pens. |
| 4 Kitchen. | 26 Goatherds. |
| 5 New wine. | 27 Dog kennels. |
| 6 Old wine. | 28 Cart houses. |
| 7 Housekeeper. | 29 Hog sties. |
| 8 Spinning room. | 30 Hog keepers. |
| 9 To sick room. | 31 Bakehouse. |
| 10 Lodges. | 32 Mill. |
| 11 Stairs to bailiff's room. | 33 Outer pond. |
| 12 Keeper of stoves. | 34 Dunghills. |
| 13 Stairs to work house. | 35 Wood and fodder. |
| 14 Wine press. | 36 Hen yard. |
| 15 Oil press. | 37, 38 Dove houses. |
| 16 Granaries. | 39 Thrushes. |
| 17 Fruit room. | 40 Poultry. |
| 18 Master of cattle. | 41 Poulters. |
| 19 Ox stalls. | 42 Porter. |
| 20 Herdsman. | 43 Dog kennels. |
| 21 Stables. | 44 Orchard. |
| 22 Grooms. | 45 Kitchen garden. |



ROMAN FARM LAYOUT
(See opposite page.)

RURAL IMPROVEMENT

We find that some farms are disadvantageously planned at the outset. In the old French districts of Canada, for example, the original farms were measured out in arpents along one central road, from which they ran back at right angles in long narrow strips. Subdivision of these lands has always run lengthwise, the strips growing narrower as each generation divided its patrimony. I have myself seen farms on the Red River in Manitoba two miles long and sixty-six feet wide; and I have been told of others the same width and four miles long. In New England and the eastern states generally, farms are often very irregular and composed of scattered, more or less isolated tracts. There will be a pasture field of 20 acres one-half mile distant from the home; a good farm lot detached by a mile, and perhaps a 10-acre wood lot two miles away. The care of such a farm is obviously much more expensive than for the same area compactly located. In many cases it would be good business to sell outlying holdings and buy other land adjoining the farm head-

quarters, even at a considerable capital outlay.

In this connection we may remember that the deeds and surveys of farm lands are not always satisfactory, and this criticism applies especially to the farm lands of New England. A new system of land transfer, such as the Torrens system, slowly coming into use in parts of New York state, would be an advantage to all landholders. Whatever the system, the farmer ought to be sure that his titles are clear and altogether sound.

The method of drawing deeds in use in the eastern states is very faulty. The bulk of the land has never been surveyed. No lines are definitely established. Brown's deed reads that his farm is bounded on the west by Black's land; and Black's deed shows that his land is bounded on the east by Brown's farm. On the only important question of where Brown's land divides from Black's the records are absolutely non-committal. It would be a very important and substantial public improvement, and in most neighborhoods worth many times the

RURAL IMPROVEMENT

cost, if the entire district could be officially surveyed and placed on permanent record, so that a man, in case of an emergency, could go out and find his own farm.

Now, when a man has found his farm and has got possession of a suitable tract, conveniently and compactly located, his next problem is to plan that whole area so that it may be most effectively and economically administered. The first thing to be done is to fix an administrative center. In plain English this usually means the location of the farmhouse and farm buildings. There are a good many farms now, and ought to be more in the future, on which the business will be conducted from a central office, leaving the dwelling house to seek a detached location. It is plain that the administrative center of the farm should be placed as nearly as possible at the geographical center. The location of buildings at one side or extreme corner of the farm is a very common and expensive fault. It is important, of course, that the buildings be located conveniently to the public road; and in case the

FARM PLANNING

public road touches only one side of the farm, this may justify an eccentric location. The practical question is whether there will be more coming and going between the buildings and the various parts of the farm, or between the buildings and the village corners and the railroad station.

Other considerations which should influence the location of the farm buildings are (1) water supply, (2) drainage, (3) aspect and protection, (4) outlook to the sun, the sky and the landscape. In coming to a decision one site will often have to be considered against another. The claims governing sites can then be balanced best by means of a sort of score card, which might take the following form:

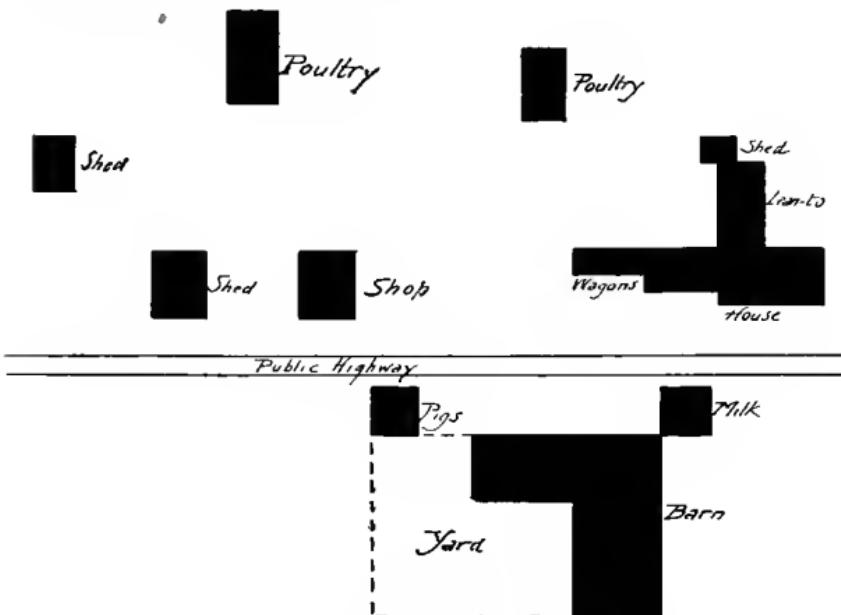
SCORE CARD—SITE FOR FARM BUILDINGS

Administrative convenience-----	30
(central location)	
Public convenience -----	20
(outlet to village and R. R.)	
Water supply -----	15
Drainage -----	10
Protection from winds -----	10
Outlook -----	15

Total-----	100

RURAL IMPROVEMENT

Of course every man (or woman) would have to make up such a score card for himself, for to some the outlook would seem as important as administrative convenience, or water supply as important as either.



HIT-OR-MISS LOCATION—AN ACTUAL EXAMPLE

With the buildings centrally located the next step will be the convenient subdivision of the farm land so as to make all parts readily accessible. Practicable roads and lanes should be located where needed, culverts put in where necessary, manageable

farm gates installed where they cannot be omitted, stiles provided in certain places, and a systematic orderly movement of the farm traffic substituted for the usual haphazard style. There are thousands of orchards which cannot be reached with a loaded spray pump, and thousands of fields from which a load of hay cannot be drawn without a large chance of upsetting.

Much of this is founded, to be sure, more upon the principles of farm management than upon the principles of landscape architecture; but it is a fact which ought to be universally acknowledged that rural improvement cannot travel far unless good farm management and taste pull together.

The farm buildings being located, their grouping with reference to one another interests us in turn. In actual practice we can seldom find a farm where this problem has been seriously considered. Such arrangement as we find in certain parts of the country is obviously the result of tradition rather than of intelligent study of the matter. In most parts of Amer-

RURAL IMPROVEMENT

ica farm buildings are merely scattered about, hit-or-miss, without much relation to one another. The house is commonly placed next the road, the barn 100 feet away from it in almost any direction, and the other buildings fall into any space which happens to be open at the time of



THE CONNECTED SERIES—VERMONT EXAMPLE

their making. This system (or lack of system) reaches its worst when the buildings are scattered "all over a forty-acre lot," so that the farmer must walk 20 miles to do a day's chores.

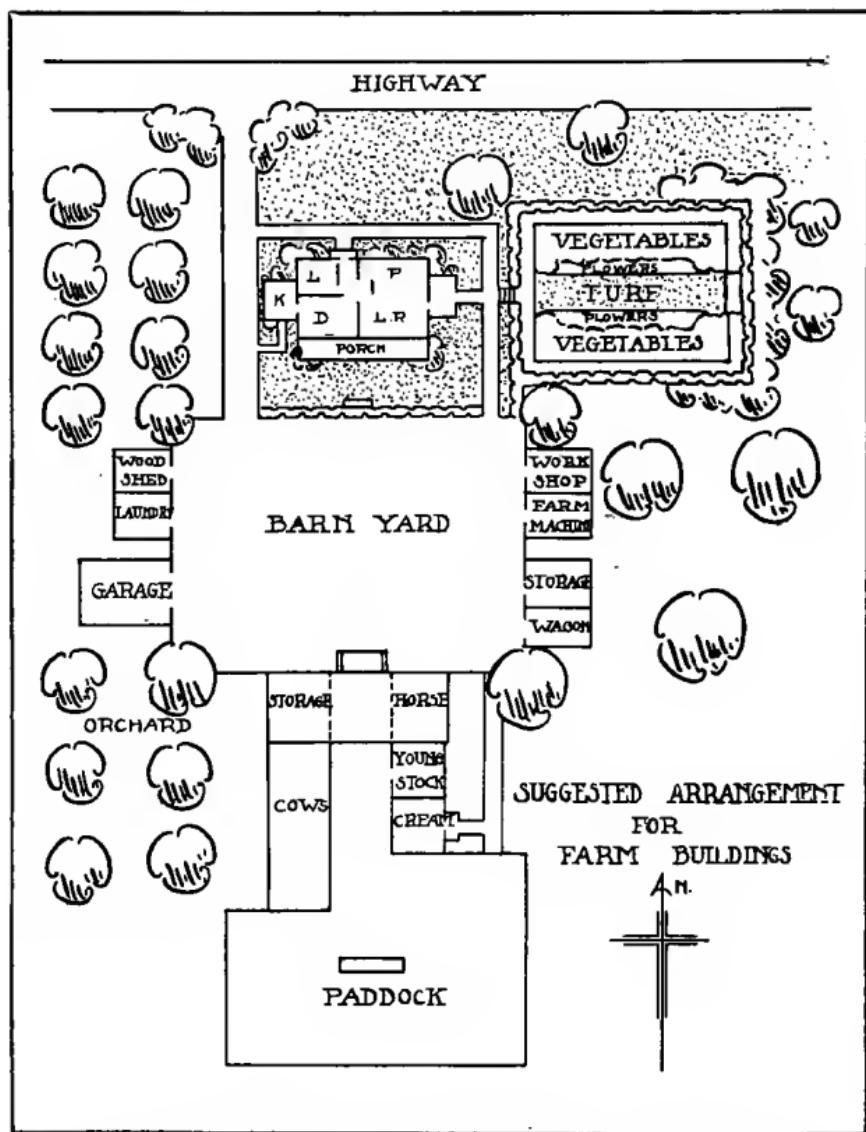
Conditions of life and climate in New England serve to develop a type of arrange-

ment compact and in many ways useful. The house was placed next the street (typically, end to the street), back of it and joined to it came the woodshed, next the granary or toolhouse, and lastly the barn, the whole forming a connected linear series. The only serious objection to this arrangement is the fire risk. If one building catches fire the whole layout is pretty sure to burn.

Another and inferior style of arrangement occasionally found in the eastern states places the house on one side of the public road with the barn and dependent buildings directly opposite, and facing the house. This arrangement is fairly convenient and reduces the fire risk somewhat, but it exhibits the premises in bad odor to the public; and no one can hope to find the best type of human culture developed in that family which from year's end to year's end gazes wistfully into the cattle yards and the manure spreader.

From a purely scientific point of view the best arrangement of farm buildings is probably the quadrangular, as shown in the

RURAL IMPROVEMENT



FARM BUILDINGS ARRANGED AROUND A QUADRANGLE

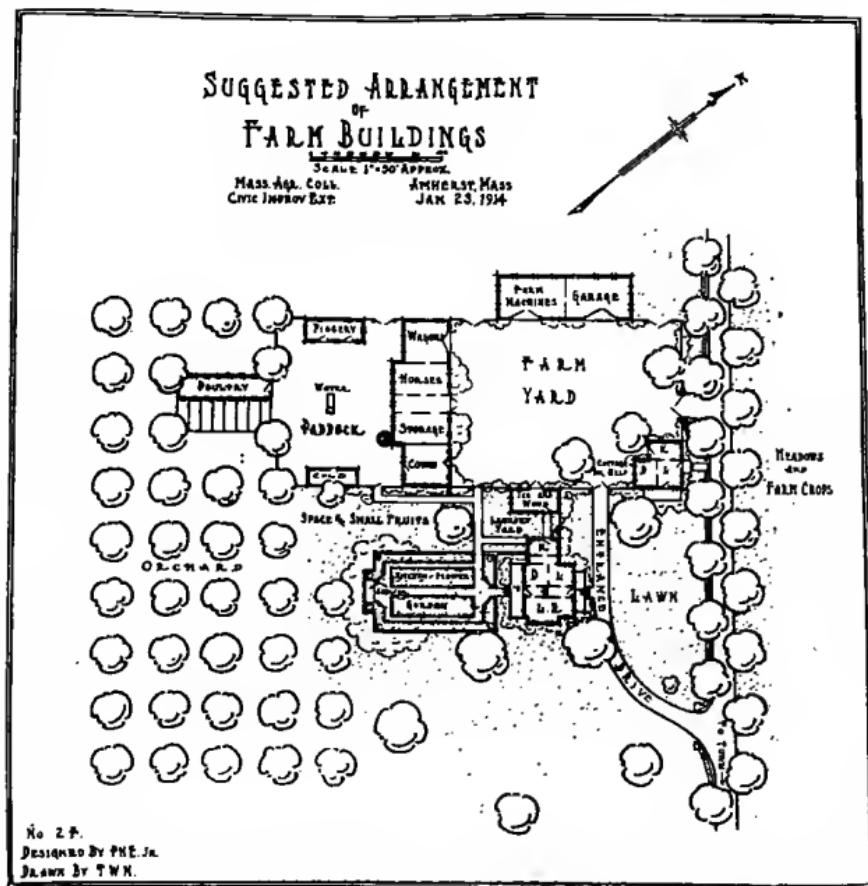
accompanying diagrams. The several unit buildings may be placed against one another, or may be somewhat detached, as circumstances may dictate. This grouping supplies the basis for the most economical management of farm business. The fire risk should be reduced by fireproof or slow-burning construction—a type of building properly within the means of modern and prosperous agriculture. There is one drawback to the quadrilateral scheme of arrangement, namely that a closed square offers great difficulties in the addition of new buildings or the extension of old ones. Fore-sight will deprive this objection of some of its force, the preventive measures being to plan the extensions with the original layout, or to leave an open axis along which the building scheme may be extended.

The artistic and purely ornamental treatment of the farm grounds is a matter which has often been discussed. It is, indeed, about the only phase of the subject which receives popular attention, although it is the last one which can be taken up in actual practice. It

RURAL IMPROVEMENT

is difficult within reasonably brief compass to give any really constructive advice in this matter, but a few suggestions must be offered nevertheless.

The ornamental treatment of farms may follow an almost infinite variety of methods,



ANOTHER QUADRANGULAR ARRANGEMENT

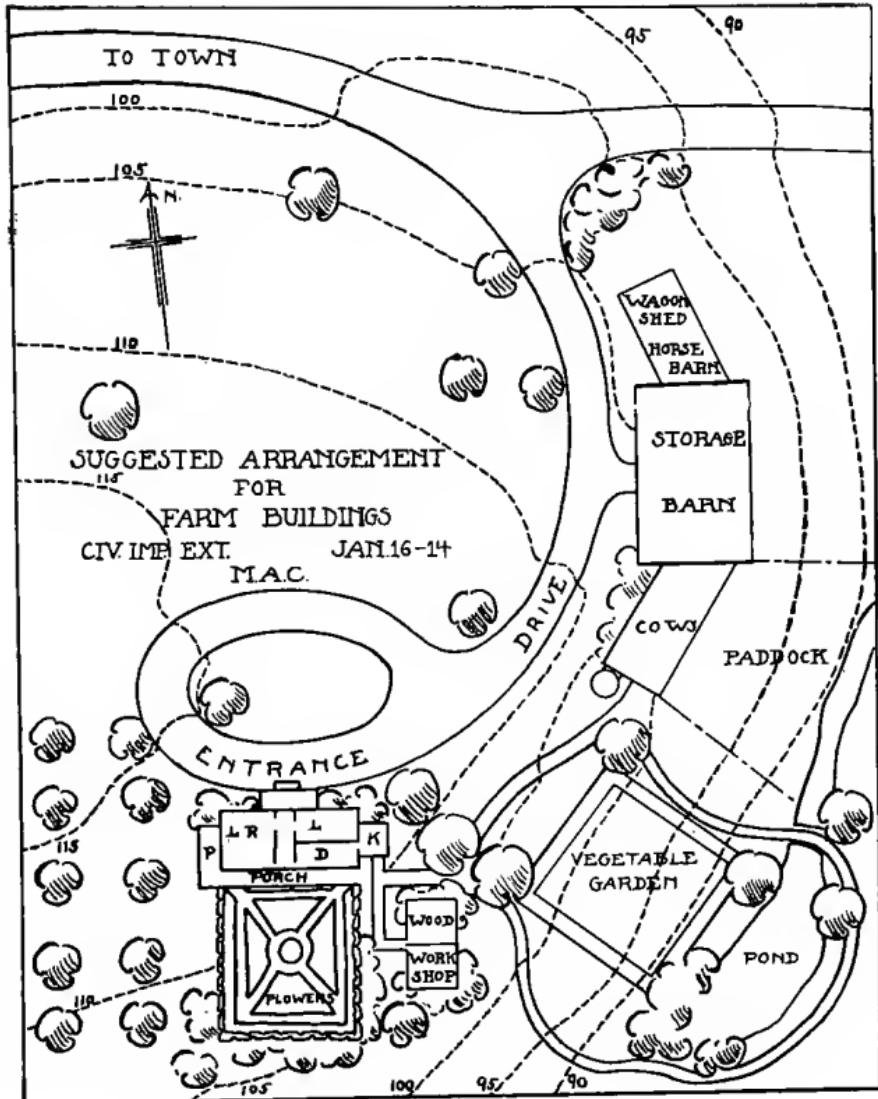
but in order to simplify our discussion of the subject, we will, rather arbitrarily, reduce these to three types, which we will call respectively the park treatment, the garden treatment and the plain treatment.

The park treatment is applicable to relatively large and prosperous farms, or to those which are the country homes of city people rather than the business farms of actual farmers. On such places there must be considerable areas—perhaps 4 or 5 acres, perhaps 400 or 500 acres—which can be given up to ornamental treatment. These areas are then developed as a private pleasure park, emphasizing all natural features of beauty, such as meadows, streams or woodland, or even creating these where conditions are favorable. Such “country seats” or farm parks are characteristic of rural England, and the artistic style to be employed in their development is inevitably English. It is the natural style of landscape gardening in its pristine and bucolic simplicity. There are a few good examples of it in America, but there ought to be thou-

sands more. There are today many thousands of American farmers (omitting for the present the city farmers) who can well afford to appropriate 10 acres or 20 acres apiece from their farms to be made into parks and pleasure grounds. In many instances such a move would pay its way as a real estate investment.

The garden treatment ought to be the most common one, especially for bona-fide farms. This scheme is based upon the principle that every farm residence should have a small bit of lawn, a flower garden and a vegetable garden, and that all these ought to be artistically brought together as one organic unit focusing upon the farmhouse as the center. These ornamental grounds ought to be small, otherwise they cannot be maintained in presentable order. Perhaps the ideal type will be somewhat like that shown on page 155—a small lawn in front of the house, a vegetable garden on the kitchen side and a flower garden on the living side of the house. The outline sketch here given is not meant necessarily to sug-

FARM PLANNING

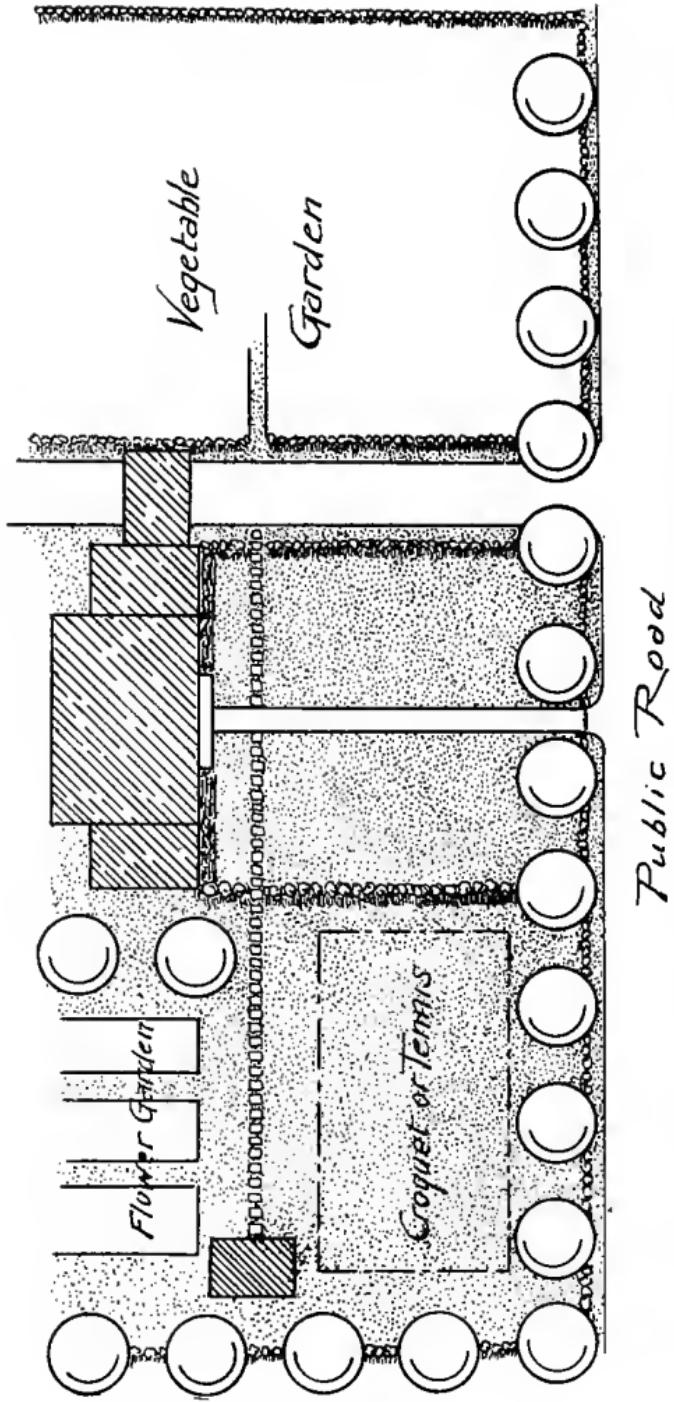


PARK-LIKE TREATMENT OF FARM GROUNDS

gest a formal garden, for, though the restricted grounds will naturally lead to a more or less formal treatment, still the taste of many farm families will develop a more free and easy arrangement.

It should be particularly noticed that the scheme here offered shows the lawn in front of the house bare of all flower beds, fountains, statuettes and furniture of every description. All these things belong in the flower garden and never on the lawn; and it is the commonest mistake of farming and gardening to put them directly in front of the house. Keep the front lawn clear and open to the last degree, plant flowers and shrubs in the garden where they can be successfully cultivated, put the cast-iron deer and the camp kettle flower pot on the junk heap.

The plain treatment, as we have called it, is a rough caption under which to describe the large number of farms whereon still simpler schemes of ornamentation must be adopted. There will still be thousands of farms where flower gardens will not be



SIMPLE TREATMENT OF FARM HOUSE FRONT YARD

prized and when a semi-ornamental treatment of the vegetable garden will seem unnecessary. But even the poorest and meanest farmyard should not be without its touch of beauty, order and dignity. There will be some front yard at least, and this will be kept clean and tidy. There will be clumps of lilacs at the front door or a trumpet vine climbing on the piazza. And best of all there will be a few big trees—elms, maples or tulip, between the house and the street. The trees are almost indispensable, but given a few really good trees the whole scheme is safe.

In case the farmhouse can sit back 100 to 500 feet from the public road, with nearly level land intervening, a straight avenue of trees leading direct to the front door is always dignified and in good taste. This arrangement is seen rather frequently before the fine old plantation houses of Virginia and the southern states and is usually in the highest degree pleasing and satisfactory.

Finally, in dealing with the improvement of farms and farm yards, we come to a mat-

ter of the utmost consequence, viz., the constant care of the premises. Many farms "look all run down," the buildings needing paint, the fences sagging, the windmill minus a wing, plows, wagons and self-binders out to the weather and standing in helpless disorder all over the front yard. Even when it does not reach its worst this disease is fatal to any real beauty in the farm life. Disorder of every sort must be absolutely banished. The place must be kept clean and tidy and constantly put to rights. This is a thousand times more important than the making of a flower garden or the planning of a pergola and a croquet court.

Such improvements of farms, farm yards and farm neighborhoods as are here urged can be promoted in various ways. Prizes can be offered by boards of agriculture or by local fair associations. It would be just as legitimate to give a liberal prize for the best planned and best kept farm in a county as to the biggest pumpkin or the gaudiest bed-quilt. Farm improvement can be talked up in farmers' clubs and especially in granges.

RURAL IMPROVEMENT

There are hundreds of subordinate and pomona granges where a vigorous propaganda of this sort would be the most helpful work undertaken in a decade. This business has so much good in it that even the churches might take it up, and an occasional sermon from the pulpit on these lines would be a welcome relief from the curse of riches and the general bow-wows. Indeed, there is not a club, lodge or organization of any sort, in business for the good of the community, which cannot wisely assist in such a campaign.

There are many misconceptions current about town and city planning, but none is farther from the fact than the notion that comprehensive plans are only for large cities. The reverse is nearer the truth.

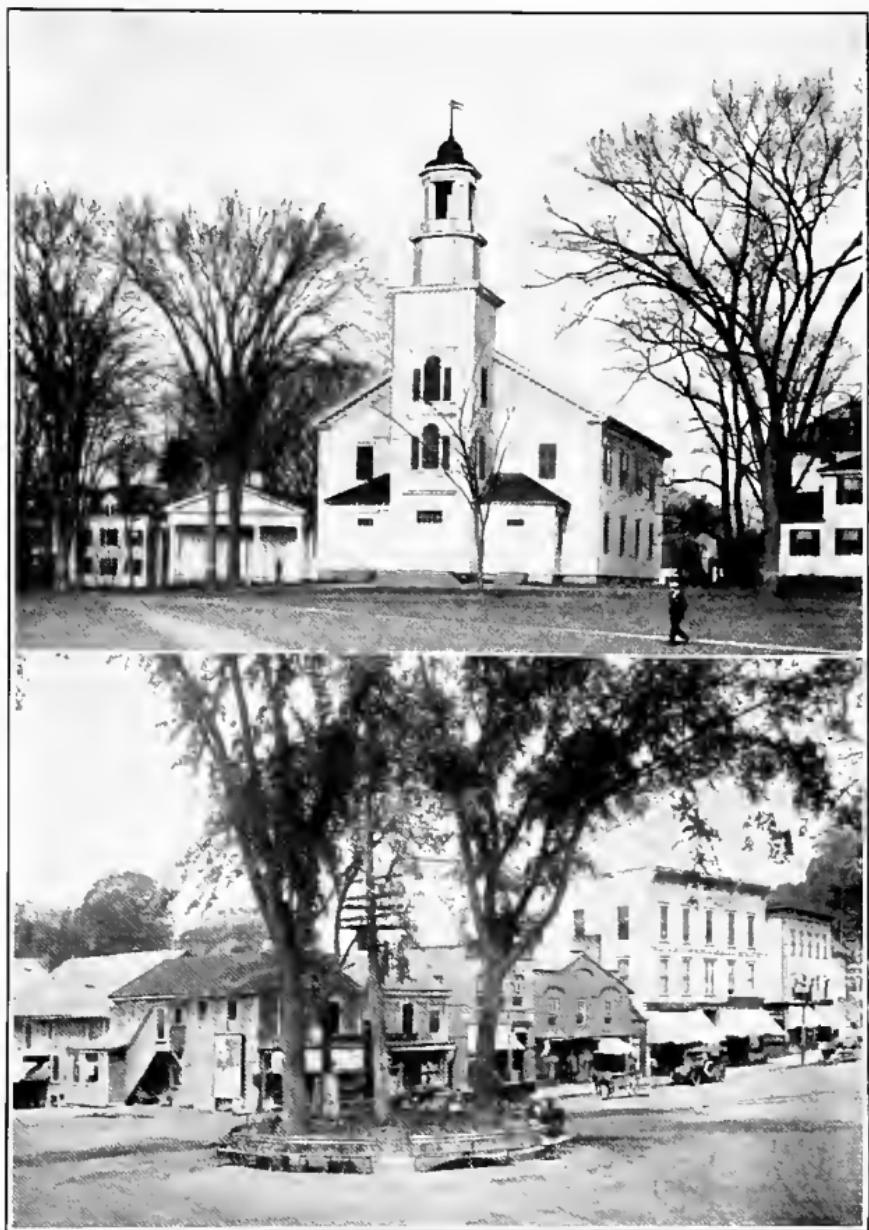
JOHN NOLEN,
“Replanning Small Cities.”

CHAPTER IX

COMMUNITY PLANNING

THAT branch of civic art in which the most active work is now being done is usually called city planning. On every hand new cities and city additions are being planned by experts, following modern ideas and introducing many features of marked improvement over old styles. Similar sane, scientific and artistic ideals ought to be applied to the planning of the rural districts and of those natural rural centers, the country villages. As relates to the planning of country roads something has already been said, in the chapter on roads and streets. The general principles of community design may now be considered in more detail and with more special reference to the villages.

We meet one serious obstacle at once in the fact that many small country villages



HANOVER, N. H., COMMON AND CHURCH.
SPRINGFIELD, VT., VILLAGE CENTER

are trying to be big cities. Even when they have actually given up all hope of metropolitan growth they still persistently, though half unconsciously, ape metropolitan behavior. They are like old maids, forsaken by opportunity, but still simpering and smiling as though commanding a fecund future. The western states are especially burdened with such still-born metropoli. Every crossroads is going to be a county seat, and every county seat aspires to be the state capital. Meanwhile no town has the inspiration and ignity to be itself. The condition of those unhappy towns which cannot be even county seats is especially pitiable. They stand about the prairies, forlorn and wretched in the extreme. The New England village is a much better community in every respect, chiefly because it is satisfied and even proud to be a village, and being proud of its place in the world it undertakes earnestly to make the best of it. In 99 villages and towns out of every 100 throughout the United States—more especially in the South and West—the first work

RURAL IMPROVEMENT

of community improvement lies in killing the poison of false ambition and establishing a patriotic self-respect.

From our present point of view the great damage that results from this foolish ambition is that the town is wrongly planned. It is laid out on the expectation that it will one day be a Chicago, a Winnipeg or a Seattle. If it were definitely designed from the first to take care of a population of 250 or 600, as the reasonable expectation might be, it would be a great deal better.

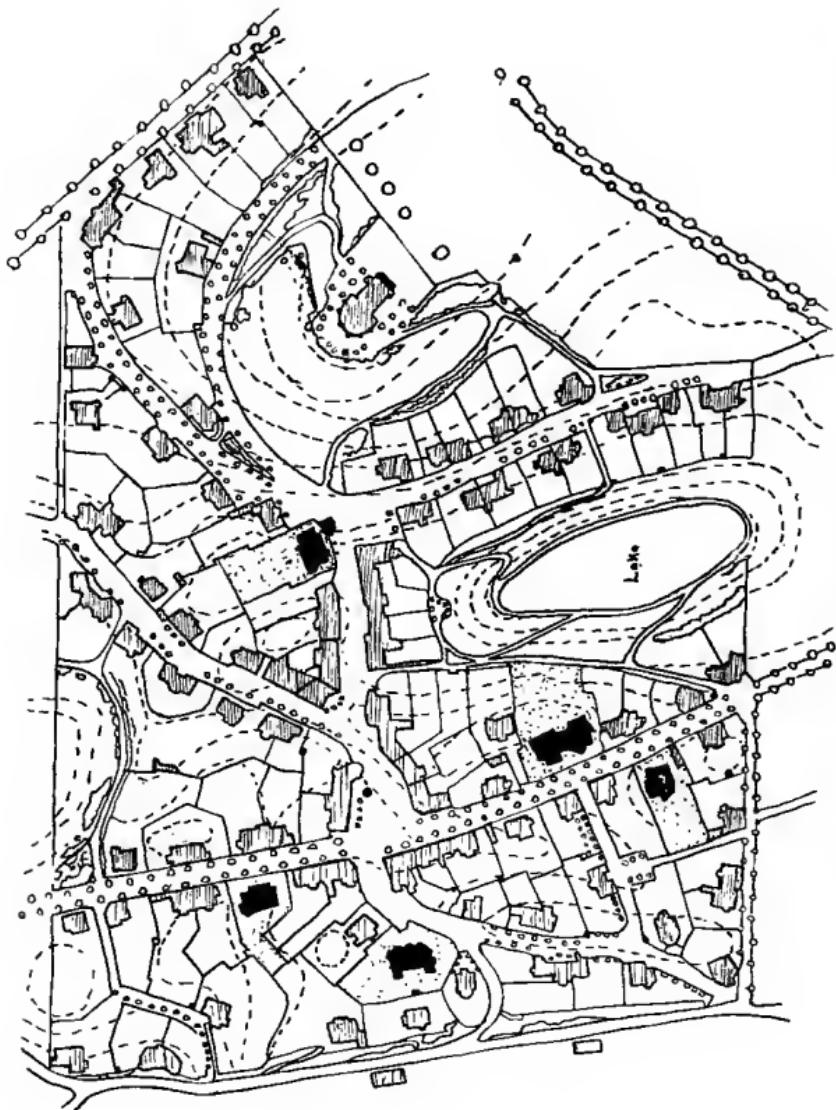
That is, it would if intelligently planned. It is wonderful, however, how little intelligence is commonly used in city planning, and especially in those places where the projectors are free to make a plan. Out on the plains railroads are still being built and some hundreds of towns (including some county seats) are being laid out on clean land every year. Surely here is the greatest opportunity in the world to put to use the best new knowledge of community planning. As most of these new towns are born with a railroad company for one parent, one would

expect the companies to introduce some technical experience into the youngsters' education. But they do not. As each new town is projected by its heedless sponsors, the land boomers and the railroad promoters, it merely follows the old, trite, childish checkerboard pattern, now known to be the worst ever devised for village, town or city.

Other expensive and inexcusable mistakes accompany this gridiron plan. Besides having spent all my boyhood in the country where this happens, I have recently visited and studied several of these new and ambitious towns and have vividly renewed my knowledge of their defects. The worst of these defects are as follows:

(1) The streets are made all the same width. Here one finds a street serving a population of 50 souls, but the street is 80 feet wide, and 60 feet of that is asphalt. The street really has no need for asphalt, but there must be so many miles of asphalt street to beat the rival town 20 miles away. Even so, 16 feet wide would have been quite asphalt enough and much cheaper; and the

RURAL IMPROVEMENT



GERMAN VILLAGE PLAN—A DISTINCTIVE TYPE OF INFORMAL DESIGN

abutting property owners would have had cool grass in front of their houses in place of black asphalt, which absorbs heat all day and gives it up all night, especially in July and August.

(2) Streets are generally too wide. In thousands of prairie towns every street is wider than the Strand in London, Friedrichstrasse in Berlin or Broadway, New York. Such streets are by no means needed for traffic and are a needless expense.

(3) Streets do not follow the contours of the land. This is the fault primarily of the rigid checkerboard system, the results of which are doubly deplorable when the straight streets run up steep hills or across narrow gullies, involving interminable expense in street making and endless damage to adjoining real estate. This is one of the most ridiculous, and fortunately one of the most widely recognized mistakes in community planning.

(4) There is a lamentable failure to reserve public grounds. Every Old World village has its open marketplace, and the

New England town has its common. These public forums have been of inestimable value in the civic life of those communities, and it is beyond explanation that the intelligent and ambitious people who have made and are making the new towns should neglect a matter of such consequence.

(5) There is a similar failure to reserve sites for public buildings. At the very outset the town expects to have schoolhouses, churches, a library and possibly other public buildings. Why provision is not made for these in the original plan passes all understanding.

The best results in the way of small villages have been secured through natural growth rather than through premeditated planning. That is, a slow and natural development in response to actual needs and guided by natural conditions of topography, will more fully satisfy all utilities than any theoretical plan evolved on paper. And the utilities thus fully satisfied—legitimate needs frankly met—there has been achieved one of the prime elements of beauty. In the

mushroom towns of the central and western states, however, the growth method cannot be so confidently relied on. There must be some sort of plan at the start. Having rejected the checkerboard layout, we are in duty bound to say what should take its place.

Now, it must be admitted that in the flat prairie regions the checkerboard design is less disastrous than in rolling or hilly country. Though it is certainly not the best style of town making, the designer hesitates to manufacture irregularities of street plan for a perfectly level site. On hills or mountainsides he can follow the contours and thus achieve picturesqueness of aspect combined with variety of prospect and convenience of life. On flat land, what shall be the designer's motif? Evidently it must be the long level horizon line—the straight line. Winding, circuitous streets will be out of the question.

Now, these straight street lines can be combined in an infinite variety of ways besides that of the gridiron. First of all they should be broken into short sections, the

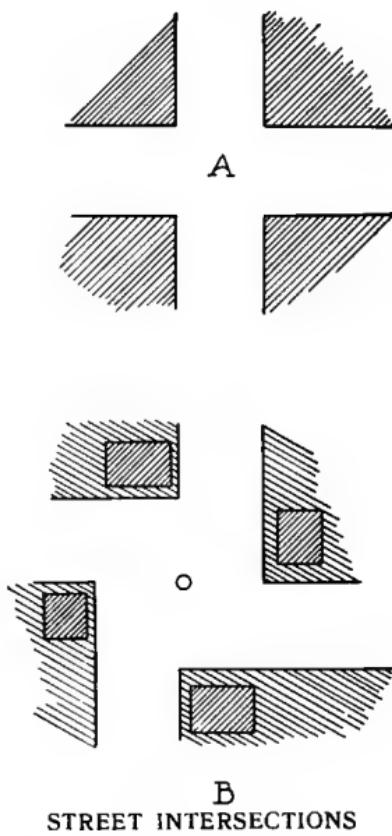
long, unterminated street on flat land being especially monotonous. It has a peculiarly futile effect. It seems to arrive nowhere.

These straight streets, broken up into short sections, should now be arranged so as to avoid, on the one hand, the monotonous parallelism of the checkerboard system, and on the other, the helter-skelter effect of no system at all. The divergencies from the four points of the compass should be reasonable and moderate.

The next point in such a plan is to secure a variety of street intersections. This highly important matter has been worked out only by the modern German planners and by the architects of the Renaissance in northern Italy. It may be applied, however, directly to the design of streets for modern American villages. Now, when two streets cross in this country it is usually thought obligatory that they should make a clean intersection; as at A. The fact is that a broken intersection, as that shown in B, has many sound advantages which make it best under certain circumstances. It gives command-

COMMUNITY PLANNING

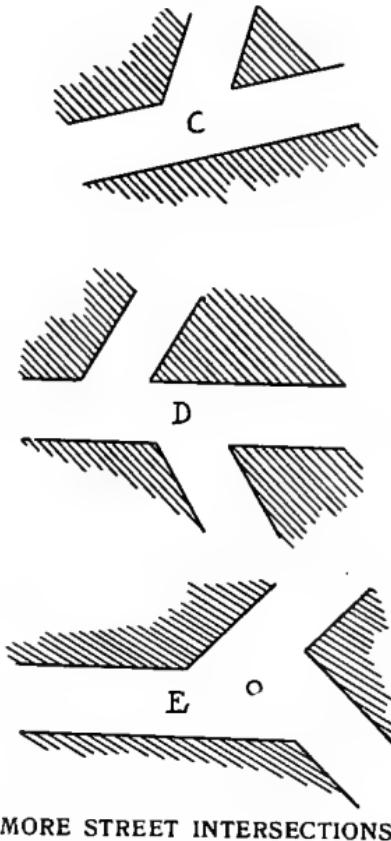
ing locations, at the end of street vistas, to four buildings. Such locations are desirable either for public buildings, business blocks or residences. Traffic is not obstructed.



But even this arrangement, though decidedly superior to the usual featureless intersection, is more stiff and formal than

RURAL IMPROVEMENT

necessary. Moreover, it cannot be frequently repeated, or it becomes more monotonous and tedious than a less pretentious

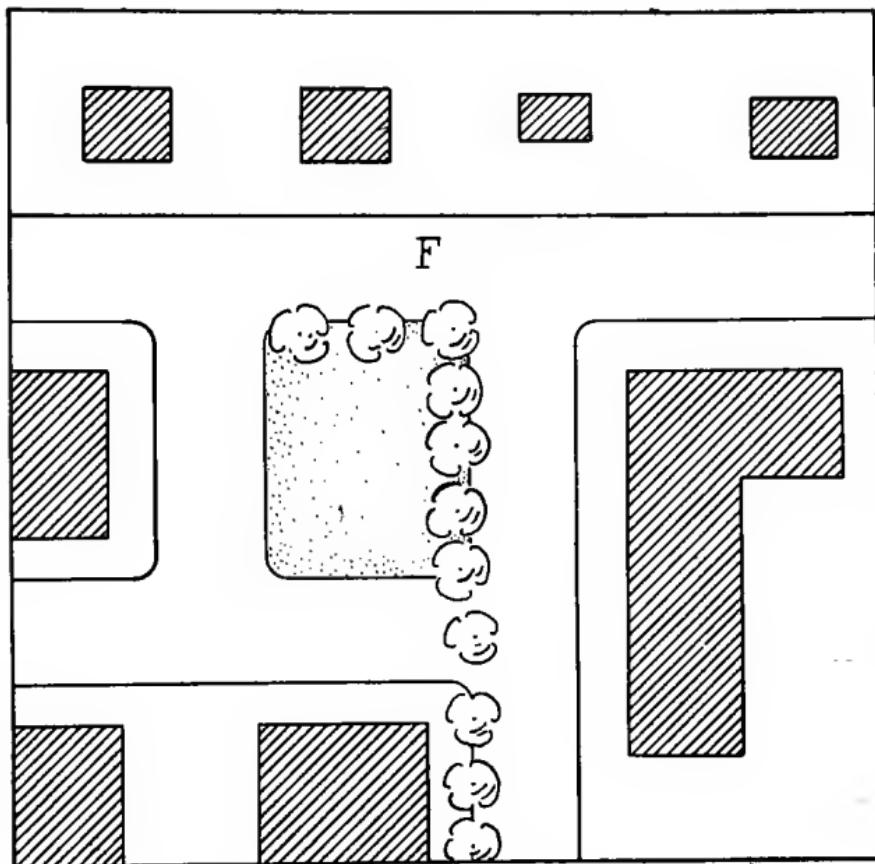


MORE STREET INTERSECTIONS

unit. Since the streets in our ideal plan are not to be parallel, they need not meet at right angles, and a great diversity and informality in the intersections may be secured, as suggested at C, D and E.

COMMUNITY PLANNING

Now, in the intersections at B and E respectively there appears to be a little dot of unused room. In this spot a fine tree may

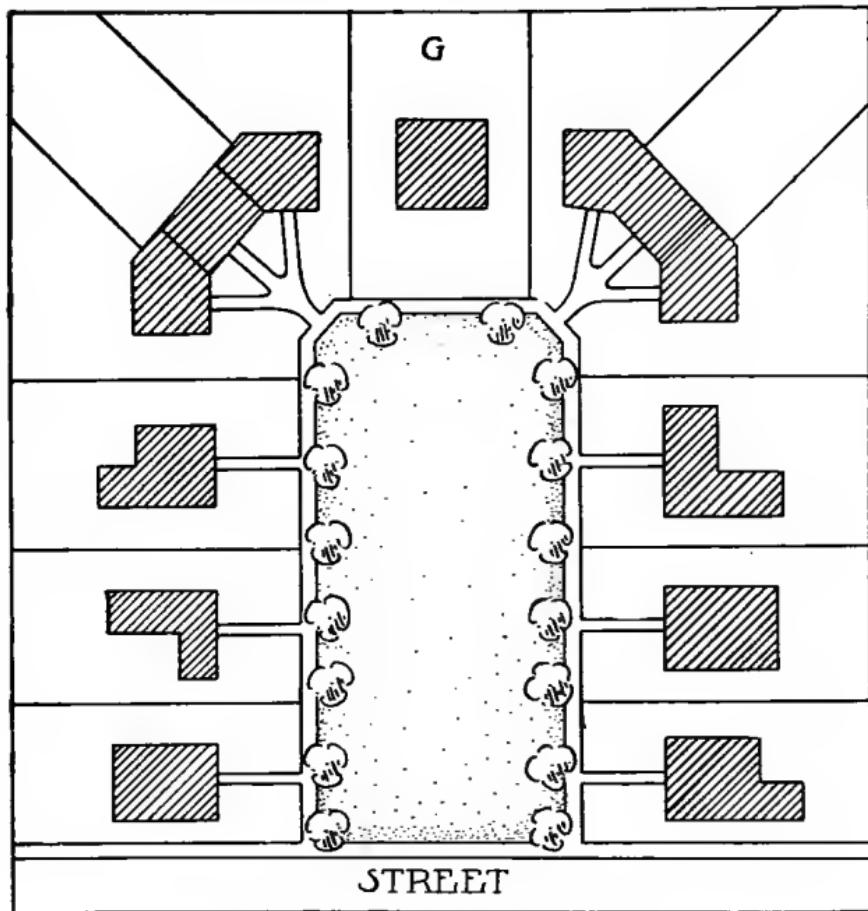


SMALL OPEN SQUARE, GEORGETOWN, MASS.

be very effectively placed, or such points become the very best of sites for fountains, statues or other memorials when required.

RURAL IMPROVEMENT

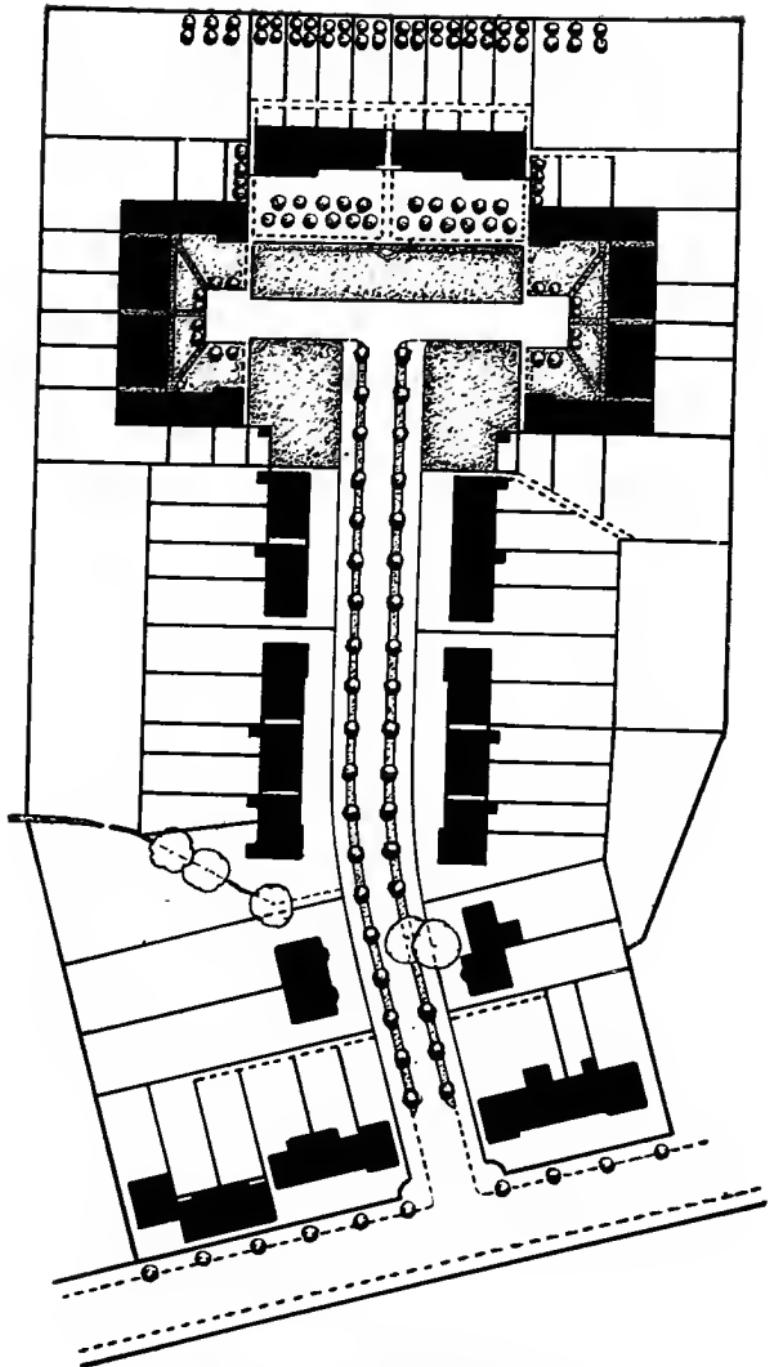
If this system of planning is carried to its proper conclusion, however, there will be



considerable larger open spaces left at many points, especially, though not always, at street junctions. Such varied and irregular

open spots are shown in the modern German plans; and in practice they give the most interesting and delightful results. The sketch plan at F shows a most attractive little open spot of this kind, something less than 100 feet square, occurring accidentally in an old New England village.

In the "garden suburbs" of England, especially in those designed by Mr. Raymond Unwin, rather frequent use is made of small public or semi-public greens recessed from the street, as shown in plan G. This little space is used for a green or park, or for a children's playground, or for a tennis court or for a common flower garden. In any case it provides a very delightful frontage for eight or a dozen dwellings. These houses, though still within immediate reach of the street, are away from the dust and gasoline and enjoy a much pleasanter outlook than can ever be arranged from 12 houses standing in a straight line along a straight street. The inlook is also to be considered; and certainly the view given to the passerby glimpsing across this little green



MORE ELABORATE RECESSED GROUP
After Raymond Unwin

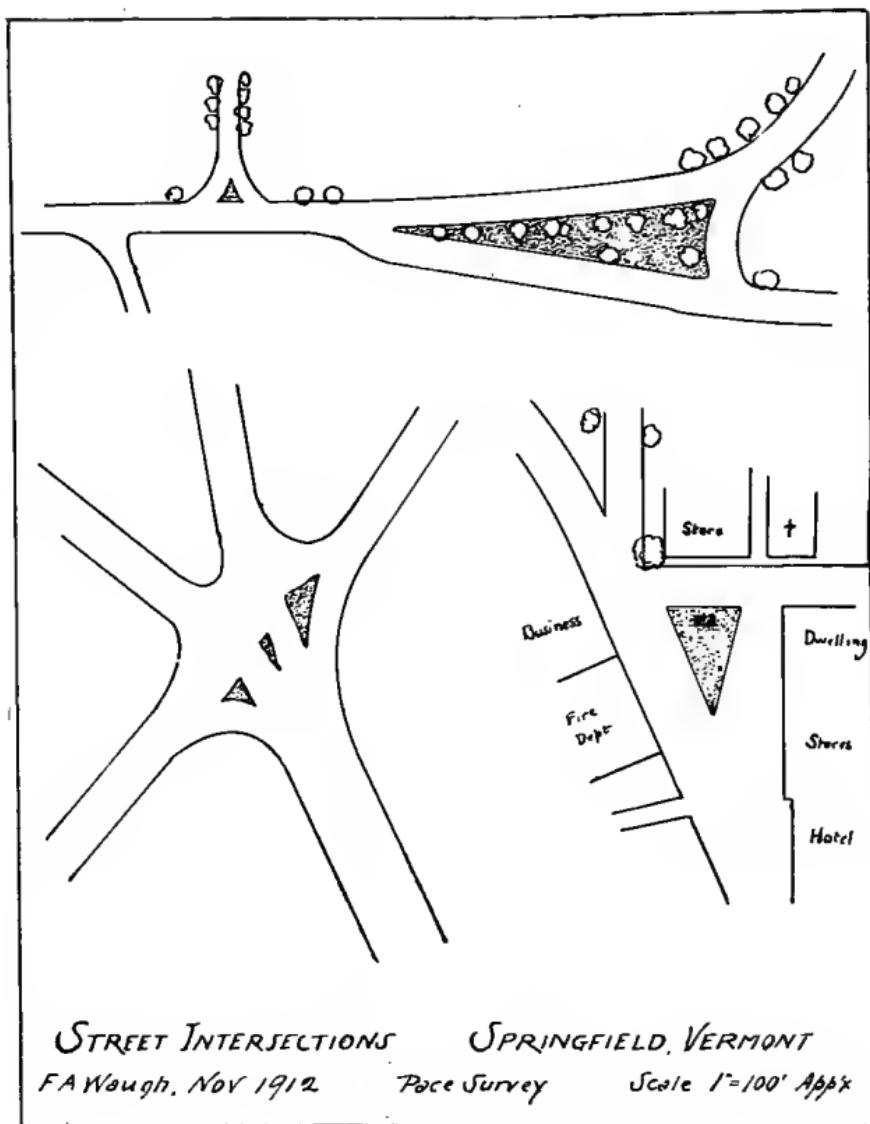
is novel, varied, and altogether charming.

In village planning also there ought to be more frequent short streets or "places" with dead ends, accommodating six to a dozen residences. Such streets are necessarily quiet and clean, being free from every possibility of through travel. The cost of street making and maintenance is reduced to the minimum.

Such suggestions as these can be put into effect freely only in towns in the nascent state, towns just being planned or new additions to existing towns. It is greatly to be hoped that future community planning, whether in cities, suburbs, or country villages, will show more variety, more art and more intelligent attention to utilitarian needs than the American plans of the last 200 years.

A pertinent question is, What can be done for the improvement of towns already monotonously built on the checkerboard plan? Careful, intelligent study of any particular case will reveal a good deal that can be done. Here and there are corners that

RURAL IMPROVEMENT

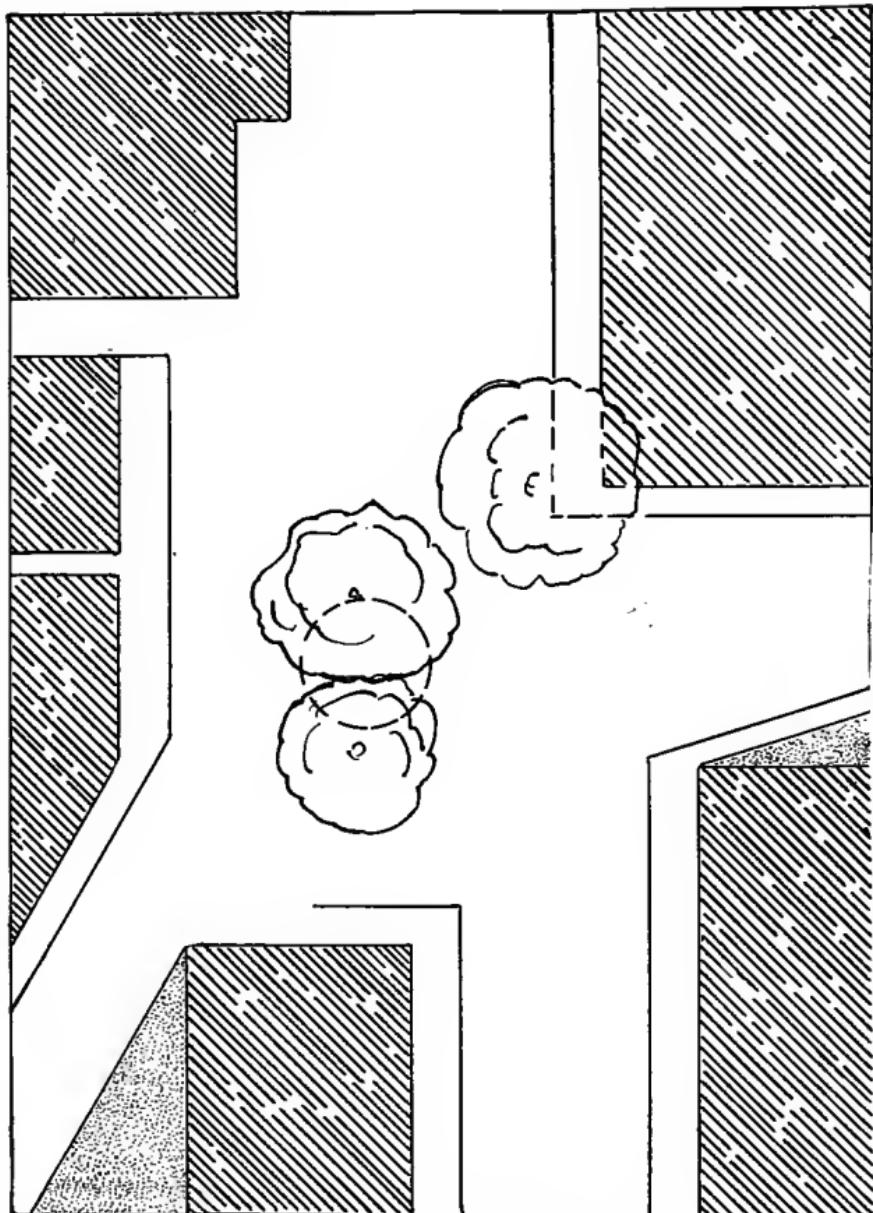


ACTUAL STREET INTERSECTIONS, SHOWING EXISTING IRREGULARITIES

can be knocked off, and which, when planted with trees or grass, become practicable commons, breaking up the dull regularity of the scheme, and introducing a sense of cozy homeliness. Here and there are entire blocks, sometimes two blocks in a place, which can be condemned for playgrounds or other public uses. The width of the streets, or at least the paved portions, can be varied in proportion to the traffic. On the surplus width varying schemes of tree planting and parking can be carried out. In a few cases street junctions may be broken up to secure diversity; and occasionally neighboring houses can be grouped so as to secure some mass effect of architecture. In this last particular truly wonderful results are secured in the garden suburbs of England and Germany—results which we cannot approach under most American conditions.

The principles of community planning are here discussed with special reference to the conditions in country towns and villages; but the same considerations apply to

RURAL IMPROVEMENT



IMPORTANT CENTRAL STREET CORNERS, FROM ACTUAL SURVEY

COMMUNITY PLANNING

some extent to community planning in the open country. For the open country ought to be planned as carefully as the town or city. The subject in its rural applications, however, is dealt with more fully in the lecture on roads.

Denn die Kräfte, die jene Welt der Ruhe, des reifen künstlerischen Behagens geschaffen haben, sind noch immer lebendig. Nur die Achtung und die Kenntnis sind vermindert. Haben wir diese erstarken lassen, dann werden auch die Kräfte wirksam und damit ein Einklang mit den Bedürfnissen des modernen Lebens wieder hergestellt werden. Diese Kräfte sind in der Hauptsache die geographischen Verhältnisse der Erdoberfläche, die mit ihren Land, Wasser und Vegetationsformen Lebensgewohnheit und Lebensmöglichkeit bestimmen. Ergänzt werden sie durch den Verkehr mit seinen wirtschaftlichen Einflüssen, die die Landgebiete einander näher bringen, die Landeinheiten in Vielheiten auflösen und umgekehrt wieder Einheitsgebiete schaffen. Diese Kräfte hatten bisher die Formen der Siedelungen, in weiterem Sinne auch die der Erdoberfläche bestimmt; sie hatten künstlerische und wirtschaftliche Veränderungen ausserordentlich beeinflusst.

ROBERT MIELKE,

“Das Dorf.”

CHAPTER X

RURAL ARCHITECTURE

IN architecture the two elements of art, utility and beauty, meet in a peculiarly even balance. Every work of architecture grows out of a genuine utilitarian need. The bridge, the church and the silo—each is built to serve some very definite purpose. Yet each must be in its way beautiful. An ugly church, an ugly bridge or an ugly silo is inexcusable. Men and women must spend their precious daily lives looking at these objects. If each look brings pleasure, then these works of architecture are serving a higher purpose in human happiness than in meeting the needs which first called them forth. On the other hand, if every look at bridge or church or silo fills the beholder with disappointment and disgust, it were better that a car wheel had been tied about that architect's neck and he had been drowned in the depths of the Great Salt Lake.

RURAL IMPROVEMENT

Architecture plays a great part, almost a leading role, in community betterment. If we are to have a country beautiful or a village beautiful (and at the same time useful), architecture must be appealed to on many sides. There must be good and beautiful houses for homes, substantial, convenient, dignified public buildings, serviceable and beautiful barns, attractive bridges, and many other public and private works of the right kind. Let us begin with the farm-houses.

It is well known that the farmhouses of America leave much to be desired. Just why they should continue to be so ugly and inconvenient is very hard to explain. To be sure, farmers generally do not and cannot employ expensive architects in planning their houses; but there are plenty of good models described and illustrated in the magazines for which the farmer subscribes, and, furthermore, there have been excellent traditions in some parts of the country which should have had a greater influence.

There are three good types of farmhouse



TYPICAL NEW ENGLAND FARMHOUSES

known in America. The first of these is the old colonial country house of New England. There are two or three varieties of this type, but all of them good. The second is the old ante-bellum plantation house of the South.



OLD STYLE NEW ENGLAND FARMHOUSE

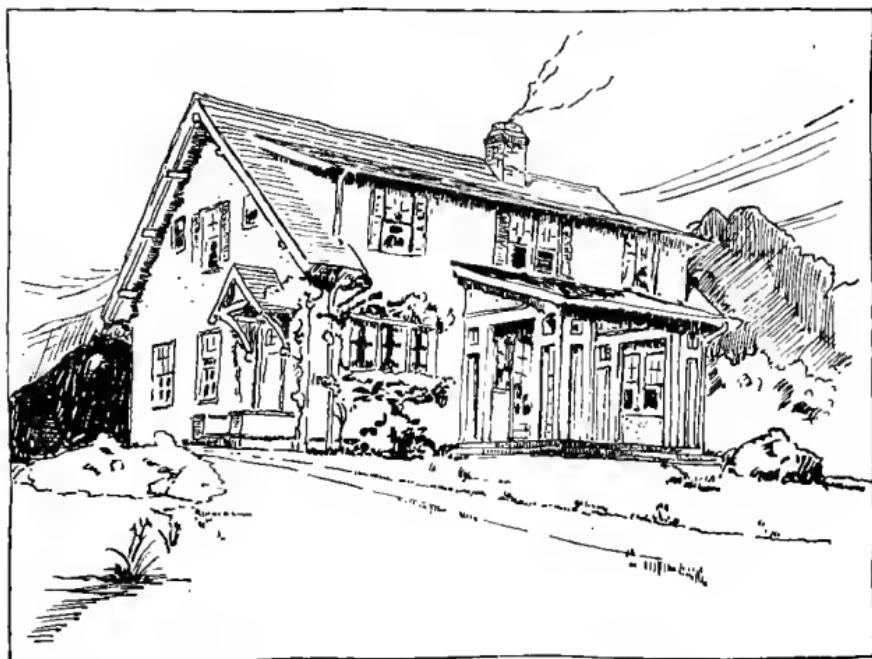
These two types were widely multiplied and universally admired in the days before the civil war; and the deep and horrible results of that war are nowhere more demonstrable than in the disappearance of these fine architectural forms. After the war men

RURAL IMPROVEMENT

simply ceased to build good houses and proceeded shamelessly to build the most crude and vulgar buildings that ever cumbered a fair country. In the South poverty and discouragement gave some excuse; but in the North, where such plausible explanation was absent, the results were even worse. It may be said with emphasis that the dwellinghouse architecture of the United States, whether on farms, in villages, or in cities, in the twenty-five years following the civil war was execrably bad. The exceptions were hardly sufficient to prove the rule. And at the present time we are just beginning to awaken from that awful architectural nightmare.

The third type of rural dwelling to which we have referred is a modern one, and has been introduced as a part of our awakening to better ideals. This is the bungalow. Now the bungalow is a special type of architecture, developed in response to rather special conditions, these conditions being primarily a level country and a warm climate. As these conditions prevail widely in

the United States, the bungalow seems adapted to a great area of country. It has two additional qualities recommending it to use on farms. First, it covers a good deal of ground and is unsuited to the crowding

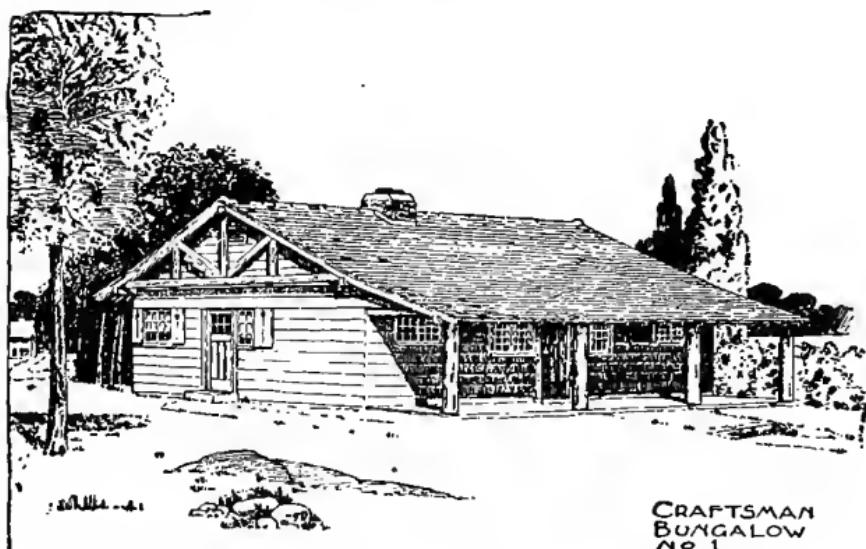


PRIZE DESIGN FOR MINNESOTA FARMHOUSE

of three-story apartments and six-story factories in cities and towns. Second, the bungalow being usually all on one floor, greatly relieves the strain of housekeeping at the precise point where relief is much to

RURAL IMPROVEMENT

be desired. It seems fair to recommend the bungalow style rather freely for use on the prosperous farms of the interior prairie states—a section where the farmhouses generally are distressingly inferior to the scale of the surrounding civilization, and where



CRAFTSMAN
BUNGALOW
No 1

SIMPLE BUNGALOW DESIGN FROM THE CRAFTSMAN

some reasonable type of architecture is sorely missed. The farmers of the middle West have generally copied their dwelling houses from the towns, and have taken the worst models at that.

This recommendation of the bungalow,

however, must not be taken wholly without qualification. A new style like this is bound to be abused. Already one sees more bungles than bungalows. People who have no intelligent ideas of the style, its logic or its adaptations, try to compromise it with their hereditary prejudices and with their preferences for Queen Anne, renaissance and early Chicago details, the results being wonderful, but seldom either convenient or beautiful.

For the northeastern states nothing could be happier than a return to the typical forms of the old colonial farmhouses, modifying these forms only enough to bring into them the modern conveniences. Such modifications would be very slight, for, though furnace heat would be introduced, the old fireplaces might well be retained, and the wiring for electric lights would not affect the house design.

Similarly the best thing that could happen to the farm architecture of the southern states would be a renaissance of the colonial type of plantation house. Spanish, mission

RURAL IMPROVEMENT

and bungalow styles are being experimented with to a considerable extent in the South; but while these may be useful in cities, villages and in the winter homes of affluent northerners, they are of very doubtful availability as models for farmhouses.



A CRAFTSMAN DESIGN FOR A FARMHOUSE

Along with questions of style and exterior design should go considerations of interior arrangement. Farmhouses have been notably lacking in interior design and in all the modern conveniences. The time has fully come to change all this. While we have not space here to tell how the kitchen should be

arranged, how the cellar should be built, or how the closets should be designed, we may insist that these matters be given thorough study whenever a new farmhouse is built. If the builder cannot afford to employ an architect (or thinks he cannot, for usually it would be economy to do so), he can at least get good plans from various magazines, and many of the state agricultural colleges are now giving considerable attention to farmhouse design.

When the modern farmhouse has been intelligently planned by the best architect it is ready to profit by all the so-called modern conveniences. These are fresh air, electric or gas lighting, furnace heat, water supply, sewerage, and in some cases electric power.

One of the greatest luxuries of life is fresh air, and in the country it is one of the cheapest. Perhaps this is the very reason why it is so lightly regarded. But the way many farmhouses are left without ventilation is hardly less than criminal. The usual style of winter comfort is to gather in the

small sitting room, with all the doors and windows doublelocked and with a roaring stove fire which burns up all the oxygen in circulation. In this hot, stuffy atmosphere, breathed hundreds of times over, the happy family, after a heavy dinner of beef stew, baked beans and mince pie, quickly goes to sleep, or at best, subsides into a stupor too dull for reading or playing checkers or figuring feeding rations for the dairy herd. The bedrooms are apt to be likewise without ventilation, and though they have the advantage of being cold, they are not fit places for human beings to sleep in. This is all very wrong, and superlatively unnecessary. It can be easily changed by anyone who has the enterprise to recognize its wickedness.

Many farmhouses are nowadays within reach of electric lighting systems. On a few farms when water power is at hand private generating plants may be wisely established. In either case the home is entitled to the benefit and convenience of the electric light. Where electric lights are not to be had,

private gas plants can be put in at quite moderate expense. The total cost for a good gas lighting installation should be between \$150 and \$300; on which the total annual charge for interest, repairs and operation will be between \$25 and \$50.

A furnace of any pattern can be installed in a farmhouse exactly as well as in a village or city dwelling. Why is it, therefore, that city houses are almost universally supplied with them, while farmhouses are almost universally without? My answer is that the farmers have not taken so much pains as the townspeople to make themselves comfortable.

On any farm where there is a running stream or a good well the buildings may enjoy just as good a water supply as the usual city house. In a few cases water may be secured from springs or streams by gravity. In other cases, where the streams are below the level of the house, the supply may be secured through the services of the oft-described and rarely seen hydraulic ram. In the large majority of cases, however, the

RURAL IMPROVEMENT

farm water supply will come from a good well. Everyone knows that this well should not be in the barnyard or where it receives the seepage from the privy and the kitchen sink. It will be better, indeed, to have it at



TOWN HALL, BRIDGEWATER, MASS.

some distance from the farm buildings, above them if possible, and have the water piped to the house and barn. This is entirely practicable if a good windmill or gasoline engine be used to pump the water. The modern method of handling this water supply is through an underground non-

freezable tank, and not through the old style inconvenient freezing overhead tank. The water is pumped into the underground tank under pressure, and this air pressure is sufficient to deliver the water wherever it is desired. Such an arrangement costs from \$100 to \$300, or about the same as the overhead installation, and makes it possible to have a continuous supply of hot and cold water in all parts of the house, dairy or other buildings, just as easily as the same conveniences can be secured in any city or village.

With the installation of a running water supply will come bathtubs and modern water closets, and these will require some species of sewage disposal. A drain from the kitchen sink into the well will no longer be regarded as sufficient provision for the farmhouse. Now, the quickest way to dispose of the problem is to run the sewage into a cesspool. A good cesspool, well constructed with proper overflow, will cost from \$10 to \$100 on the ordinary farm; and such a system constitutes a very substantial improvement over the usual inconveniences

RURAL IMPROVEMENT

of the farmhouse. Yet better sanitary facilities than these are to be easily secured through the use of modern septic tanks or through a system of sewage disposal in underground tiles. Detailed descriptions of such installations with full directions for doing the work are to be had in various bulletins. The very best possible sewerage system on the ordinary farm may be put in for the price of one wagon-load of fat hogs.

The home of the prosperous and up-to-date farmer should also be supplied with power, usually secured from the electric current or from the ubiquitous gasoline engine. Such power may be used for churning, washing, ironing and for many other purposes not yet clearly seen; for it is a notorious and scandalous fact that the improvements in house work on the farms have not kept pace with the improvements in barn work. While the drudgery of the men's work has been greatly relieved in later years through the introduction of machinery, very little has been done to eliminate the drudgery from women's work. Yet

careful attention to this problem in the light of present knowledge will accomplish wonders.

THE VILLAGE HOME

It has long been the rule in this country for farmers to move to town as soon as the stress of making money and educating the children is over. It is a bad rule, and one which we hope soon to see revoked or reversed. It has been founded on the belief—to a large extent erroneous—that more of the comforts and conveniences of life are to be secured in the town than in the country.

In exterior architectural style and dignity the town house assuredly has not led the country house. During the last half century the most shoddy, squalid, vulgar dwelling-house architecture ever known since men dwelt beautifully in tents has flourished in American villages and suburbs. The great problem now is the popularization of saner and simpler styles. These are unquestionably coming in; and it should be a part of every improvement campaign to promote

the public interest in better architecture. Though the public is interested first in the external appearance of village dwelling houses, attention must always be directed at the same time to the improvement of internal arrangements. Throughout these chapters we have insisted that beauty and utility must travel hand in hand, and this is certainly not the place for them to part company.

PUBLIC BUILDINGS

All public buildings ought to be beautiful, dignified, honest and well constructed. How few of them in our day and place fulfill these plain requirements! Public buildings grow up through a world of graft. Some contractor, making a good thing for himself and a mighty poor thing for the public, leaves the community disgraced with a shabby library. The architect for the court house is chosen, not for his knowledge of architecture so much as for his knowledge of politics. Somebody with a pull is almost sure to turn up in connection with

every public building. Even the churches are scarcely honest. Many of them are crying examples of sham and shoddy. Instead of being community examples of honesty, dignity and beauty, they stand as monuments of pretentious, vulgar ugliness.



GRANGE HALL, NORWAY, ME.

Of course not all public buildings are so bad as this. Times are improving, both architecturally and politically. Everywhere we are seeing more good school-houses, fine churches, excellent town halls and county courthouses, libraries and even

RURAL IMPROVEMENT

railway stations in which the country can well take pride. Such examples should be greatly multiplied. A good public building in any community has an enormous influence for good; it does more perhaps to raise the public taste than any other lesson that can be given. Conversely, a vulgar, and shoddy public building can have no other effect than to corrupt the public taste and to lower the whole tone of civic life in the community afflicted with it. No more glorious testimony could be imagined to the high civic ideals of Florence, Rothenberg, Bremen and hundreds of other old European towns and cities than the magnificent public buildings which have come down from earlier centuries. Two hundred years from now how many of our American public buildings will remain? And what will our great-grandchildren then think of them? The answer to these questions will give us a juster valuation of our present civic work.

Any town or village of fine civic spirit and high ambitions will go still further in fostering high ideals in architecture. Such

communities will secure the benefit of good design also in shops and factories. The usual country store, though it may be, in fact, the main center of social and political life in the small village, does not present the physical appearance to justify so high a calling. In England, Germany, France and Belgium, however, shopkeepers have shown that such little stores may be gems of architectural beauty. Such buildings are good advertising, and worth much more to any groceryman's business than a million square yards of soap and axle grease announcements painted on the country landscape. In a few glad spots in America the old country stores have been replaced by beautiful and suitable modern buildings. In a good many places factories have been built having considerable dignity and architectural beauty. A certain soap factory in Buffalo, for instance, has more artistic distinction than many an art museum or Carnegie library. These admirable beginnings mark the plain way along which civic art will make its progress.

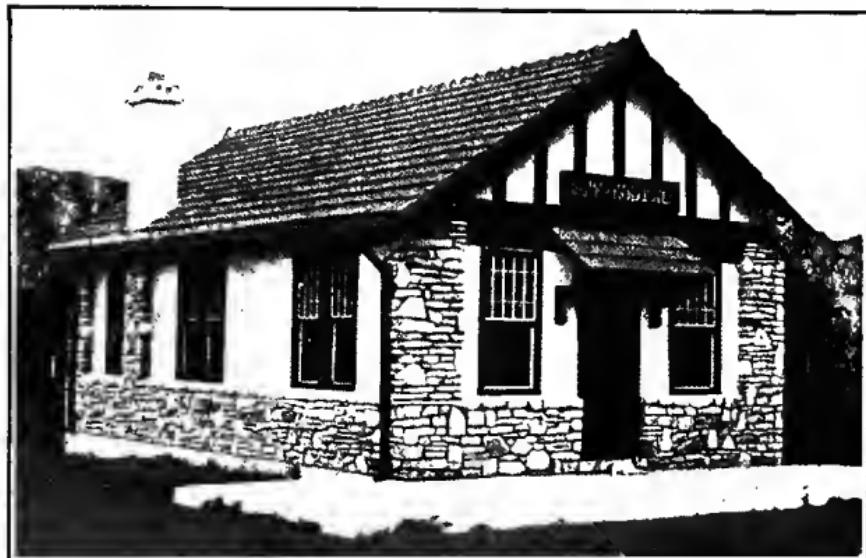
RURAL IMPROVEMENT

The same spirit should extend at once to all other kinds of construction wherever the work falls under the public eye. Bridges ought to be good looking, as well as strong and durable. The present vogue of cement has done a great deal to bring in attractive bridges and to drive out the peculiarly wretched iron trusswork which has been almost universal in American bridge construction.

Even the small items will be carefully regarded in this way, and the lamp posts, crossroads signs and rubbish boxes will be studied with a view to making them agreeable to the eye. Telephone and trolley poles will be made as inconspicuous as possible, and on occasion may appear to be even ornamental.

When we come to public monuments, memorials, fountains, etc., which are frankly valued as civic embellishments without utilitarian excuse, the esthetic test ought to be rigorously applied. That is certain. But how many of our existing American examples of public statuary and semi-

public memorials would stand even a schoolgirl's test for dignity and beauty? The usual soldiers' monument is a fright, and the customary "ornamental" fountain is a writhing heap of ugliness. It has been



COUNTRY BANK, HOLLISTER, MO. A BEAUTIFUL AND APPROPRIATE BUILDING

a great national misfortune that our crop of soldiers' and sailors' monuments in this country was harvested in the period just following the civil war—that period when the public taste, like the public morals, ran down to the lowest possible ebb. In all the

RURAL IMPROVEMENT

states, North and South, these soldiers' monuments stand, fine reminders of the loyalty and love which prompted them, but awful examples of the impoverished taste which could design nothing beautiful nor worthy of the heroic deeds yet to be commemorated. Too many such monuments have been designed by the village blacksmith and the constable, or by the board of aldermen. It ought to be plain that such works of art should be designed by artists; and unless something truly compatible with the theme can be built, it would be much better to go without the statue.

Perhaps this is the place to say a word about temporary decorations for passing festivals. During old home week the village would put on gala dress. Or "When Johnny comes marching home," or the popular politician is elected governor, or the one hundredth anniversary of the town is to be celebrated, a special effort will be made to have the town look its best and merriest. All such undertakings should be put into the hands of a small committee, preferably not

more than three to five, including men and women of education and taste, and a unified scheme of decoration carried out under their strict direction. If a professional decorator can be employed, so much the better—and cheaper. When the decorations are left to the personal initiative of each individual citizen the result is scattering, inharmonious and trivial, while the entire cost is likely to be greater than when the work is all in the hands of one experienced man.

It is everywhere recognized to be the common fault of American civil and political life that people disregard the services of experts. In architecture, statuary and art matters generally, the need of expert help is peculiarly plain. Here is the point at which better methods can be most easily introduced.

The incessant and increasing duties of farm life leave one, however well disposed, but little time and but scant strength for esthetic study. The farmhouse is the center of the home life and of the homely thought and feeling of its inmates. The farm on which one has been born and bred is the center and standpoint from which he regards the world without. All those more tender emotions which are common to our nature, and which attach themselves to the home, find their development on the farm as well as in the town. Sentimentally considered, it matters little whether the object of these emotions be on the farm, in the wilderness, in the village, or in the city. Fortunately, man is by no means a creature of emotion alone; and the satisfaction and good of living are less a matter of feeling than of activity, industry and intelligence. The place in which one lives is more or less satisfactory in proportion as it facilitates and encourages the better and more useful living.

GEO. E. WARING, JR.,
"Farm Villages."

CHAPTER XI

INCIDENTAL PROBLEMS

THE problems of civic improvement have been dealt with in a somewhat systematic manner in the foregoing chapters. For the most part these problems have been related to large general principles. There remain, however, some incidental smaller problems which need to be spoken of, and which can be most conveniently treated by grouping them together in this chapter. Those which we shall speak of here are school grounds, cemeteries, trolley stations, rest rooms and nuisances.

SCHOOL GROUNDS

Every local community takes special interest in the schoolhouse and grounds. It is because these are universally recognized as public property. It is everywhere understood, further, that these schoolhouses and

RURAL IMPROVEMENT

grounds are not all they ought to be, and the fact that nearly every neighborhood is sincerely ashamed of the squalid conditions of school premises is in itself evidence of higher ideals. Whenever anyone says a word for the improvement of schoolhouse



SCHOOLHOUSE WITHOUT PLANTINGS OR OTHER IMPROVEMENT

or school grounds his suggestions meet an immediate response from all the neighbors. With this firmly established sympathy, the conditions at the various country schools certainly ought to be better than they are. Obviously the country people need to be aroused on this subject, and particularly

they need someone to take the lead in bringing about better conditions.

A great deal has been said and written about the beautification of school grounds. This has meant chiefly the planting of trees and shrubbery, and in extreme cases the development of flower gardens. Unfortunately this enthusiasm has run chiefly to talk and only in rare instances has come down to actual practice. Tree planting is undertaken more or less systematically on arbor days. This is a pleasant custom. Arbor day ought to be annually celebrated with suitable festivities. There should be attractive programs and a well-organized social meeting, including the parents and patrons of the school. The social program ought not to be allowed to crowd out the tree-planting feature, for there should be substantial, practical accomplishment in this line on every arbor day. Not only should trees be planted, but shrubs and other things also. There should be older trees, which will require pruning; and tree pruning, spraying, repairing and fertilizing are just as appro-

priate to arbor day as tree planting itself. In fact, the purposes of the program should be broadened to cover all the life and care of trees rather than being confined to the mere incident of planting.

In most of the small publications on this subject, there are more or less elaborate plans shown for the development of school grounds. Most of these are suggestive and good. It is still very rare, however, to find a school ground which has been developed according to any definite plan. On most small grounds, it is obvious that any elaborate landscape gardener's design would be of little use. In a rough, general way, we may say that a border of trees and shrubs along the boundary of the grounds will constitute the only important plantings. Unless the grounds are above the average size, it will hardly be advisable to use any part of the remaining space except for play. By all odds, the most important feature in school grounds development is the simple, systematic arrangement on orderly lines of the few necessary furnishings. If there is a

fence, it should be straight; if there is a gate, it should hang on its hinges; if there are trees, they should be in straight rows; if there is a row of trees, they should be all of the same kind; if there are shrubs, they



SCHOOLHOUSE WITH APPROPRIATE PLANTINGS—CORNELL UNIVERSITY GROUNDS

should be in straight hedge rows or in compact masses; if there are privies and other outbuildings, they should be set on the boundary lines and in proper alignment with the main building; if walks are built,

they should be direct and should be kept clean and properly edged; if there is a lawn, it should be kept clean. These things are far more important than a landscape plan or any botanical collection of plants.

The school grounds require not only a neat and orderly arrangement of the original materials, but they require the still more important element of care. Most cases of disheartening squalor which one finds on school grounds are due merely to the fact that no care is given. The place must be kept clean and tidy. This may be easily accomplished providing the school has an energetic teacher and the teacher has the sympathy and support of the parents and patrons. No appropriations of money are necessary—the teacher and pupils can do all the work that is required to keep any school grounds in order.

In connection with the schools and school grounds, other similar problems are arising, especially in more progressive communities. It is found that other civic needs may be supplied and that the public property

delegated for this purpose can best be centered about the schoolhouse. In some rural communities, country life has developed so far already as to provide civic centers, which are merely groupings of community interests. At such centers, one will find the public schoolhouse (usually a centralized school), public playgrounds, experimental grounds, and sometimes the churches and grange halls. The location of these buildings in a group of this sort is highly to be commended. It amounts to the same thing in the neighborhood planning which the centralization of farm buildings means in farm planning. When the public buildings are scattered all over the township, there is the same unfortunate dispersion of business which results when the farm buildings are scattered all over the farm.

Suitable playgrounds are particularly needed in all country districts, and naturally and almost necessarily are located with the public schools. Such playgrounds should contain always a baseball diamond, sometimes a football field, usually provisions for

RURAL IMPROVEMENT

basket ball, in thickly settled neighborhoods should contain tennis courts, should have some special playground apparatus for the use of small children, and if possible should have provisions for skating in winter. The equipment for small children is now supplied at moderate prices at many large manufacturers' and some of this apparatus may fairly be called indispensable. If the playground is not for the small children, what, indeed, is it for?

School gardens and experimental grounds are now being undertaken by some of the more progressive country schools. There can be no difference of opinion about the desirability of such improvements in any neighborhood where they can be reasonably well supported. It may be well to enter here a word of caution to prevent failure from over-enthusiasm. Such school gardens and experimental grounds need not and should not be so large and elaborate as the experiment grounds of a state experiment station. The experiments must be really very minor demonstrations, undertaken on

a small scale chiefly for the benefit of the school children. A plot of land 20 feet square, well cared for, will be much more valuable than 20 acres well neglected. There are very few schools which can give sufficient care to more than a quarter of an



AN ATTRACTIVE COMMON, AMHERST, MASS.

acre. Probably the usual area will have to be even less. If the school experiment grounds go above half an acre, it will usually be necessary to hire outside help for their maintenance, and as soon as that is

RURAL IMPROVEMENT

done, the limit of usefulness has been reached.

CEMETERIES

The public cemeteries have been referred to already in the chapter on public grounds. It seems proper, however, to add a word or two on this subject here. It is a matter of public knowledge and almost of public scandal that cemeteries in general are shamelessly neglected. The remedy for this is not the discovery of any artistic design, but the enforcement of plain, ordinary principles of housekeeping. If people will not adopt the cremation plan, which is altogether better from every standpoint, they should at least keep the cemeteries in presentable condition.

Something can be gained, however, in the matter of the primary design. Most cemeteries are dreary and repulsive merely in the matter of arrangement. A dreary plain is usually chosen as the cemetery site, chiefly, as I am told, because the digging is easier there. If pleasant undulating ground, well

furnished with trees, could be chosen, the premises would always be more pleasant, restful and attractive. It would seem as though graves placed beneath the shade of well-grown woods were always more properly situated than those on an open sandy territory out in the blazing sun. And yet it is not once in a thousand times that we ever see interments made in this manner. There are a few instances, mostly of expensive city cemeteries, where attractive scenery has been used or developed, and where the cemetery comes to be a beautiful park. Such a treatment of the cemetery problem, however, seems to be especially appropriate to the country, and as there are positively no objections to it, it may be confidently urged.

TROLLEY STATIONS

In another chapter, something has been said about the development of trolley stations. We have seen that they serve much the same purposes now served by the railway stations. They are the entrance gates

RURAL IMPROVEMENT

to the villages. Thousands of trolley stations must be built in the next few years, and it is highly important that they should be wisely located, decently designed, and well built. In connection with such trolley sta-



TROLLEY STATION, MASSACHUSETTS AGRICULTURAL COLLEGE

tions, other minor public services should be developed in certain cases. For instance, many of the trolley lines are used for freight and express shipments. Especially where the shipment of milk is an important item these trolley stations should make some pro-

vision for this traffic. In other words, the station should contain suitable room for the storage of milk cans or other materials which have to be handled.

In a great many cases, the trolley station will offer the most practicable opportunity for the installation of a public comfort room, a convenience sadly needed in most of our towns and villages. Where drainage facilities are suitable and water supply and sewage connections convenient, the best way is to have such public comfort stations below the ground level, forming thus a sort of cellar to the trolley station. In many instances, however, such an arrangement is impracticable, and then the necessary conveniences may be arranged in a separate room on the same level as the waiting room.

REST ROOMS

Somewhat in the same line is the plan of the village rest room, now being developed in many places, especially in the central western states. Every progressive town has

RURAL IMPROVEMENT

found it highly desirable to cater to the needs of the visitors from the farming districts. In this way such rest rooms are usually provided with special reference to the needs of women and children. There are bathroom conveniences, and frequently also



REST ROOM, LUVERNE, MINN

cooking conveniences where a cup of tea can be made or a pot of coffee warmed. Reports agree most unanimously to the effect that where such rest rooms have been established and reasonably well managed, they have been very popular. The whole scheme

is so simple, easy and inexpensive that it is hard to explain why it has not been more generally adopted.

NUISANCES

In keeping any community up to its best, there occasionally arise problems in the suppression of nuisances. In fact, there are certain features of our civilization which naturally tend to become nuisances, and which have to be checked in every locality, and which sometimes have to be dealt with by most vigorous means. One of the most common of these is the advertising nuisance. Patent medicine advertising, liquor advertising, and corset advertising are permitted to cover the face of the landscape. These are sometimes excused as being necessary to the promotion of business. This excuse is wholly worthless and ridiculous—no legitimate business needs this kind of advertising or indeed thrives by it. Advertising in itself is thoroughly sound business, but in order to serve its purpose, it must

please the people whom it reaches. The moment it becomes offensive to them, it has lost its business utility.

A good deal has been written as to the best ways of dealing with this advertising nuisance. It has been found that any community which judiciously and vigorously sets about it can do away with its bill boards. The women's clubs have managed many successful campaigns of this sort. In general the best way to combat this evil is through legislation, and the best legislative means is through heavy excise taxes on billboard advertising. Happily the trouble is much less in rural districts than in cities, but at the same time it is a more conspicuous evil in the country than in the city. Everything should be done at all times to rid the country of every form of landscape advertising.

Trolley, telephone and electric light wires also tend to become a public nuisance. They clutter up the public highways, sometimes becoming truly dangerous, always forming a serious detriment to the land-

scape. Wires carrying electricity are always dangerous put near trees, and in the last few years have killed hundreds of thousands of the best street trees in the country. They should be constantly looked after to prevent injuries of this kind, but as far as possible the policy should be to keep all such wires out of the public highways. The proper location for telephone, telegraph and electric light wires is positively not in the highways, but in the alleys and along back boundaries of lots. In closely settled villages, these wires should be carried underground or along the tops of buildings. A great deal can be done by intelligent planning and by vigorous campaigns toward the reduction of the wire nuisance.

While the advertising nuisance and the wire nuisance just mentioned are the most serious ones in the country, neither one of these comes under the legal definition of the term. The law recognizes certain public nuisances which may be abated through the action of the courts. Fortunately we have very few such problems to deal with in the

RURAL IMPROVEMENT

country. It is a curious, significant and illustrative example which we find in some of the prohibition states where local rum holes have been abolished under the nuisance laws. This shows that the community can protect itself against every kind of public damage. No man, woman or corporation will be permitted to injure the people at large without due redress, no matter what the nature of the difficulty may be. The rights of the community are so well established that they may take the matter into their hands and remove the source of trouble.

Can nothing be done to preserve for the use and enjoyment of the great unorganized body of the common people some fine parts, at least, of this seaside wilderness of Maine? It would seem as if the mere self-interest of hotel proprietors and landowners would have accomplished much more in this direction than it yet has. If, for instance, East Point near York, or Dice's Head at Castine, or Great Head near Bar Harbor should be fenced off as private property, all the other property owners of the neighborhood would have to subtract something from the value of their estates. And, conversely, if these or other like points of vantage, or any of the ancient border forts, were preserved to public uses by local associations or by the commonwealth, every estate and every form of property in the neighborhood would gain in value. Public-spirited men would doubtless give to such associations rights of way, and even lands occasionally, and the raising of money for the purchase of favorite points might not prove to be so difficult as at first it seems.

CHARLES ELIOT,
Landscape Architect.

CHAPTER XII

IMPROVEMENT PROGRAMS

COMMUNITY improvement begins with personal leadership. Unless there is some man or woman, or some group of persons, who can really exercise the faculties and responsibilities of leadership, nothing whatever can be accomplished. No amount of imported talent, of outside influence or of donated money can move any neighborhood, village or city forward without this primary requisite of leaders permanently identified with the community. How are such leaders to be supplied to communities which do not have them? And how shall leadership be developed in communities where it is now latent? These are distinctly vital questions, but they hardly belong in the realm of civic art. For our purposes we shall be obliged to assume the presence of live per-

IMPROVEMENT PROGRAMS

sonal leaders in every neighborhood where systematic improvement work is to be undertaken; but we must recognize the fundamental necessity of this personal beginning point, and not make the foolish mistake of thinking that any scheme of physical betterments will run itself.

Given, therefore, a competent human leadership, community improvement involves four somewhat distinct phases, and the work will progress much more satisfactorily if these different steps follow one another in logical order. They are:

1. The survey.
2. The plan.
3. The organization and execution.
4. Maintenance.

Let us now consider these different phases in some detail in order to see our way clear with the whole serious business of neighborhood development.

THE SURVEY

Every general undertaking for the improvement of any neighborhood, be it farm

RURAL IMPROVEMENT

ing district, country village or modern city, should begin upon the basis of a logical plan, and a logical plan can be made only on the basis of a careful survey. Such a survey and such a plan should be made by an expert, and it is usually important that the expert making the survey and plan be not a resident of the community. Local prejudices often work havoc with sound neighborhood planning; and, furthermore, any man who is a resident of a particular neighborhood or village and accustomed to its various aspects is generally blind to many obvious faults and is sure to overlook plain opportunities of improvement.

Elsewhere we have given some emphasis to the principle that community improvement enterprises should be unified, and have deprecated the very common mistake of separating physical betterment, economic improvement and social reform. This highly valuable co-operation of effort should begin with the survey. Let us suggest it, therefore, in our outline showing how these problems are to be taken up.



A WESTERN PRAIRIE TOWN

IMPROVEMENT PROGRAMS

THE COMMUNITY SURVEY

1. Physical resources and needs, including such items as roads, public buildings, commons, parks, playgrounds, scenery, street trees, etc.—in fact, all the materials of civic art, every physical thing which is to be touched by a campaign for civic improvement.
2. Economic resources, conditions and needs, covering the agricultural and other industries and the means of their improvement.
3. Social resources and needs, such as educational facilities, churches, libraries, granges and other organizations of all sorts.

As we shall be obliged to forego any detailed study of the economic and social problems here introduced, we may be justified in giving them a brief word or two before dismissing them.

Personal leadership aside, the success of any plan of community betterment rests upon the economic basis. No improvements of consequence can be made unless the community is prosperous, unless industry yields more than a niggardly subsistence to the people. Thus in a farming community the first undertaking must be to improve the agriculture. As soon as the farmers begin to find life easier it will be possible for them to talk of playgrounds for the chil-

RURAL IMPROVEMENT

dren, of better schools, of libraries, and of better preachers in the churches.

Now, the means of economic improvement in agriculture are very well known and very well organized. They center



A BIT OF PLEASANT RURAL ROADSIDE SCENERY

round the state agricultural colleges, the experiment stations and the state boards of agriculture. (I do not mention the grange because I believe its influence to be primarily social rather than economic.) The agricultural survey of any section should

be made by the experts of the agricultural college or under their direction, and the subsequent plan for economic improvement should come from the same source. An enormous amount of work has already been done by colleges, experiment stations and boards of agriculture in fostering agricultural improvement of all sorts, but the thing which has not been done, and which cries from the street corners to be done, is to give individual communities broad, careful, sympathetic, expert study, suggesting general plans of economic organization and progress. There are hundreds of communities, rural and suburban, in which the industries need to be completely reorganized and put upon a new track; and such readjustments would be acceptable anywhere.

Very roughly indicated, such a survey might find in a particular community a large area of land adapted to fruit growing, but without the skill, the experience, the capital or the organization to develop this resource. The expert and disinterested outside adviser might plan for a demonstration

orchard and a local horticultural school to develop the knowledge of fruit growing; he might propose and possibly secure the establishment of local banking facilities for making capital more available; and finally he might outline and possibly assist in the formation of a local fruit growers' organization which could develop a successful market.

Farm industries change very slowly and are notoriously hard to reorganize. For this reason there are thousands of neighborhoods where present farm practice is badly adapted to present conditions. One community is making market milk and shipping it 200 miles at a loss. Another section continues to grow coarse grain crops long after the expansion of near-by cities offers a profitable market for the products of more intensive farming. Such general problems as these should be studied in the economic survey; and this work, if done by competent men, should result in definite and serviceable plans for community advance along industrial lines.

In villages and cities other industries besides agriculture have to be considered, and the inter-relation of divers industries comes to be of great significance. This may make the industrial branch of the survey more difficult, but it renders it even more important. The general methods of procedure will be the same as already outlined.

What we have said as to the economic survey and plan needs very little translation to make it intelligible in the social world. The opportunities here are quite as large, and the needs as urgent. For, as no improvement can begin except on the foundation of economic prosperity, so no real advance can continue without social efficiency. If the community is socially sterile, no increase in the production of potatoes or the price of pork will ever save it. In American experience we have repeatedly met this sobering fact, that families leave their farms as soon as they become prosperous. The kernel of the whole rural problem, as it has been clearly stated by President Kenyon L. Butterfield, is to maintain happy and effi-

cient families upon the farms. There must, therefore, be made a social survey; and on the foundation of such an investigation, the whole social structure should be rebuilt according to a well-considered, scientific, modern plan.

The social survey will ascertain the school population and compare it with the school facilities; it will enumerate the churches and learn what they are doing for the community; it will look to libraries and clubs; in every rural neighborhood it will try to find a live grange active in all economic, educational and social enterprises; it will take account of other organizations—lodges, women's clubs, farmers' institutes, boys' and girls' clubs—in short, every group in which the social instinct of the people has manifested itself.

The social expert will find it easy to point out possible improvements in most neighborhoods. A consolidation of churches is so much needed in many places that present conditions are recognized as a public scandal. In some places there are too many

IMPROVEMENT PROGRAMS

lodges, guilds, clubs and committees. Social simplification would do wonders for some communities. In other places, more often in rural neighborhoods, an occasional new



THE COUNTRY ROADS SHOULD BE SO MANY MILES OF
PUBLIC PARK

organization would be very useful. Rural districts especially lack organizations for the benefit of women and boys—perhaps for girls. A good woman's literary or domestic arts club would be a boon to many a coun-

tryside. We might even tolerate a suffragist propaganda if it would get the women out of their tiresome kitchens and lead them together in friendly social intercourse. Similarly a club for the big boys would solve some of the knottiest neighborhood problems. Such a club might promote baseball, rowing, competitive swimming, horse racing and trap shooting in the summer, and snow shoeing, hunting and basket ball in the winter. Should the big boys' club occasionally invite the big girls' club to a sleigh ride no great harm would follow.

We have dwelt thus at some length on the economic and social aspects of these questions because no program of improvement devoted exclusively to physical problems (as commonly understood in the term village improvement) can get very far. Physical, economic and social problems are vitally inter-related. In neither field can much progress be made while the other fields are neglected. A church revival cannot accomplish its whole purpose unless accompanied by street cleaning, and the em-

bellishment of front yards is hardly worth while unless the home life is equally embellished with good thoughts and acts of social kindness. Every community therefore must be studied as a whole, and an improvement program must cover all its needs.

Returning now to the field of civic art, where our immediate interests center, let us consider more in detail the proposed survey. The civic artist, going into any neighborhood for his professional work will begin by a detailed examination of the physical resources. The usual matters of study will be the following:

1. Roads. Street plan (see page 38), condition of the roads, road building (page 44).
2. Street trees (page 58).
3. Town commons and local parks (page 113).
4. Picnic grounds, scenery reservations and scenic roads (page 103).
5. Playgrounds (page 115).
6. Schoolhouses and grounds (page 109).
7. Civic centers (page 83).
8. Public buildings (page 196).
9. Churches, church grounds, cemeteries (page 111).
10. Architectural conditions, including factories, private dwellings, etc. (page 181).
11. Private grounds (page 122).
12. Railway stations and grounds (page 21).
13. Trolley entrances and trolley waiting stations (page 26).
14. General maintenance (page 239).

RURAL IMPROVEMENT

THE PLAN

After checking over this list the civic surveyor is able to see very clearly what the specific needs of the district are—the acquisition of a beautiful lake, the building of trolley waiting stations, the extension of the school grounds, better care of street trees, etc. Knowing these, he can usually suggest means by which the needs can be eventually satisfied.

The man making the survey should then make a full report to the community. In it he should first enumerate and discuss all the good things in the town or district (it is more important for the community to realize its good points than its defects); second, he should point out the deficiencies, with special suggestions for their correction; and, lastly, he should recommend general policies and forms of organization or administration likely to bring better results in the future.

Especially in cases where civic art can be combined, as it always ought to be, with economic advance and social reform, there



THE PLEASURES OF THE OPEN FIELDS SHOULD BE PRESERVED FOR ALL

IMPROVEMENT PROGRAMS

should be prepared a definite program of community betterments. When the list of desirable improvements has been duly studied, verified and checked off, each approved item should be given a date representing the time at which it is expected the specific improvement can be accomplished. These can then all be arranged in a chronological order. Such a program would look something like the following:

IMPROVEMENT PROGRAM

FOR THE TOWN OF FREEBURG

NOTE.—This imaginary town is supposed to cover 25 square miles, to contain one small village, to have a total population of 3,000; to have one railroad and two trolley lines, and to be devoted chiefly to diversified agriculture.

FOR THE YEAR 1915

1. Organize a local federation for community betterment (see page 9).
2. Reorganize the grange (supposing it to be dormant) and intensify its work, giving special attention to improved methods in farming.
3. Hold a special agricultural school of one week. In this seek the help of the state agricultural college and other agencies. Probable cost \$150.
4. Clean up the town common, streets, school grounds, cemeteries and other public grounds, and keep them clean. Probable cost, \$200.

FOR THE YEAR 1916

5. Organize a woman's club.

RURAL IMPROVEMENT

6. Build a mile of permanent macadam road between the railroad station and the village center. Probable cost, \$3,500.
7. Hold another agricultural school of one week dealing with some local specialty, as market milk, poultry raising or onion growing. Probable cost, \$150.

FOR THE YEAR 1917

8. Build another mile of permanent road. Specify the location. Probable cost, \$4,000.
9. Organize in a small and tentative way a selling association for handling the chief product or products of the town.
10. Through co-operation of the grange, local churches and other organizations, secure a course of good lectures and entertainments. Should be self-supporting.

FOR THE YEAR 1918

11. Develop a tree-planting campaign for the benefit of street and roadside trees.
12. Acquire a playground. Probable cost, \$500. Perhaps some ambitious citizen will accommodately die and leave the desired land to the town.
13. Build a new schoolhouse in a new and larger lot. Probable net cost, \$7,500.
14. Celebrate the 300th anniversary of the founding of the town by an "old home week," accompanied by a community exhibit in which all forces and all organizations in the community will endeavor to show what each is doing for the common welfare.

Such a program should be extended to cover ten to twenty years, perhaps more. It should be given the largest possible publicity. Copies should be put up in the post-office, posted in every schoolhouse, and in every church, and printed in the local paper.

It should have the widest discussion and the most searching criticism. Finally, it should be adopted, as far as any legislative machinery can adopt it, and given the sanction of general acceptance, the presumption being that a plan so constructed, so discussed and so approved will be carried out. Of course everyone will realize that changes in the program will be inevitable, but they need not be frequent and never vital. The main issue lies in the co-operation of all the people and all the forces in the community for the constant improvement of the whole neighborhood, and this great purpose will be most materially assisted by keeping before the community such a thoroughly tested improvement program as we have here suggestively outlined.

MAINTENANCE

Every rational plan of improvement must take account of maintenance. The first, last and ever present problem is that of keeping the town or the country clean. Whether or not cleanliness is next to godli-

RURAL IMPROVEMENT

ness, it is the prime requisite of civic art. It is to civic improvement just what housekeeping is to household art. Without good, efficient, ceaseless housekeeping the home quickly falls into disorder; and a disorderly house is just as great an impossibility as a dirty disorderly town. To keep a town or a neighborhood clean and in good order requires just the same constant, laborious housewifely care that is necessary in keeping any home comfortable.

This sort of care, in housekeeping or townkeeping, requires moral qualities of some strength. It also requires a large amount of hard labor. This labor is expensive; and just as housekeeping (when the housekeeper is allowed reasonable wages) costs more than house furnishing, so town maintenance costs more than town improvements. Or rather let us say it ought to—for this principle is not recognized in most places and the scale of local townkeeping is not up to the common standard of housekeeping.

A few professional estimates will throw

some light on the proper cost of town cleaning. The most definitely ascertained cost pertains to the care of commons or parks. The average cost under favorable conditions throughout the United States is \$110 an acre a year. The proper cost for village commons may be put at from \$75 to \$100



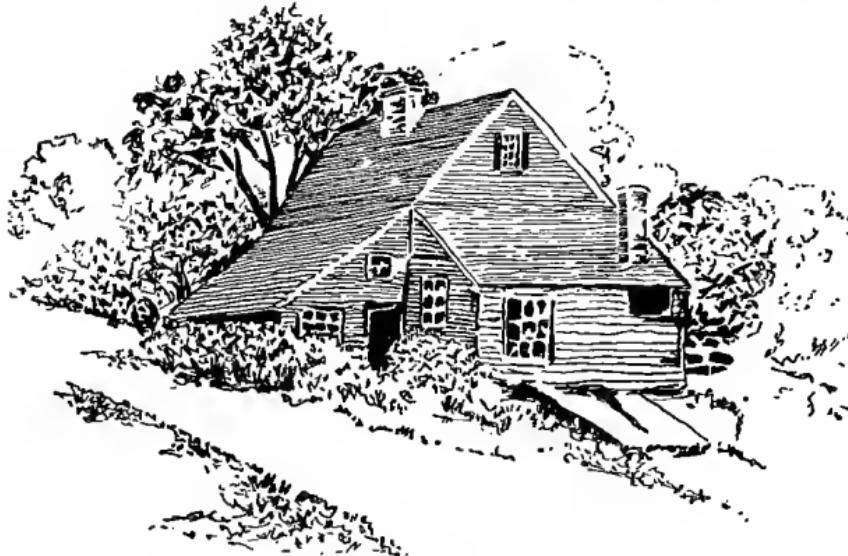
GOOD WELL-KEPT HOMES, THE GREATEST CIVIC ASSET

an acre a year. Where the areas are much used the cost will rise. It may be easily reckoned, therefore, that the village which has a four-acre park or common near the center of population where it receives considerable use and should be kept up in good

RURAL IMPROVEMENT

order, should appropriate \$300 to \$400 annually for that purpose. The customary allowance is less than one-fourth of that amount.

The cost of keeping streets clean has not been so often computed, but it may be safely



THE PICTURESQUENESS OF NEGLECT

said that, in the ordinary town or village of 2,000 to 5,000 inhabitants having ten to thirty miles of street in constant use, the cost of keeping them clean should be \$10 to \$20 a mile a year. This is entirely aside from physical repairs.

IMPROVEMENT PROGRAMS

The cost of handling ashes, swill and other garbage is usually taken out of the private citizens. Each householder pays for the removal of his own waste. It would be cheaper for all and fairer to the poorer classes if most towns would handle the garbage at public expense. This part of the municipal housekeeping should, then, cost 40 to 70 cents a year for each inhabitant.

The maintenance work is the dullest and most difficult part of civic art, as it is the most essential. The real test of the village improvement society comes on this point. The best committee of the best men and women should be assigned to this duty.

It is probably true that the first and most important step in bringing about a federation of rural social forces is to educate all concerned to the desirability of such a federation—to sow the seeds of the idea. So far as machinery is concerned it may not be necessary to form any new organization. Indeed, what is chiefly necessary is a sort of clearing-house for an exchange of ideas and plans among all who are at work on any phase of the rural social problem.

KENYON L. BUTTERFIELD,

"Chapters in Rural Progress."

CHAPTER XIII

ORGANIZATION AND MANAGEMENT

THE typical agency of rural betterment is the village improvement society. In its modern form this seems to be an American invention, the first village improvement society having been organized in Stockbridge, Mass., in 1853. The form of organization is usually very simple, with few executive officers, with scant legislative machinery and a general lack of red tape. There are usually a president, a secretary and a treasurer, while the active work of the society is usually intrusted to committees, as a committee on roads and streets, one on parks and commons, one on school grounds, one to look after the cemeteries, and other committees, each one in charge of one of the particular improvement enterprises adopted by the society. The membership is always voluntary, and the members usually pay a

RURAL IMPROVEMENT

small annual fee, which is a contribution to the work in hand. In a few instances these village improvement societies take on qualities of greater dignity and permanency. They become incorporated and acquire titles to property and hold land or buildings as trustees for the public.

While the village improvement society is a very simple and informal organization, as a rule—and probably better so—its place in the community is frequently taken by other organizations acting in still more indirect and informal fashion. Certainly the commonest substitute of this kind is the woman's club. Also it is one of the best. In hundreds of fortunate towns an energetic woman's club has laid aside the studying of Browning and Grecian art for street cleaning, public playgrounds and better schools. Or if the literary studies have not been finally laid aside, they have been splendidly supplemented by the study of conditions nearer home and—what is even more important—by active efforts for the amelioration of those conditions.

Sometimes the woman's club begins by organizing a single committee on village improvement, or by managing a campaign for the preservation of some historic spot. But once begun on concrete improvements the club usually goes rapidly forward to the organization of other committees for the accomplishment of other reforms. It may be the planting of street trees, the laying of sewers or the closing of saloons, for the woman's club is apt to be the first group of citizens to see that village improvement is all of one piece, and that sanitary and esthetic reforms must go hand in hand with political and moral reforms.

It is hardly necessary to advise women's clubs embarking in these enterprises to call to their aid the men of the community, for the cases are rare in which they have neglected so much available assistance. The support and advice of the men citizens is essential, but the ladies—God bless them!—frequently supply the real initiative and bear the main burdens of the work.

Other local groups not organized prima-

RURAL IMPROVEMENT

rily for village improvement work sometimes accept similar opportunities when offered. For example, practical improvement work has been taken up by the local grange. Committees have been appointed, money raised and important public works directed. The grange has often been the agent for renovating local politics, closing saloons, toning up the schools, and less frequently for improving roads, planting trees, preserving picnic and pleasure grounds, etc.

In rarer instances a local church has taken the lead. In one-church towns or in homogeneous communities the way is easily open for the church to assume such leadership—and it may be easily believed that the church would be immensely strengthened in any community where it would show itself capable of practical leadership in these indispensable human concerns.

The masculine counterpart of the woman's club is the board of trade or the chamber of commerce. Even many small towns have active boards of trade, and such socie-

ties often undertake local improvement work with vim and intelligence. The methods of management are the same as in other associations doing similar work. Committees are organized to collect funds and to direct particular enterprises. Transportation facilities are improved, public buildings secured, parks and boulevards designed and constructed and other public works of all sorts put through.

In general it may be accepted as a sound rule that, where some existing local society, as a women's club, a board of trade, a grange or a church, can undertake the direction of village improvement work, it is better to place it in such hands rather than to organize a new village improvement society for the purpose. The undue multiplication of societies is a characteristic weakness of American life. Three men or six women cannot meet twice anywhere for any purpose without proceeding to write up a constitution and by-laws and to elect one another president, secretary and treasurer. Much effort is spent in organization which

RURAL IMPROVEMENT

might better go to the actual work in view.

Where some further organization seems desirable for the promotion of local improvements, it is often best to form a federation of existing societies. I recently assisted at the organization of such a federation, which was brought about by associating two delegates elected by each of the existing local organizations. Among the societies represented were the church, the Sunday School, the young people's society, the grange, and the ancient order of United Workmen. It is in the highest degree valuable, whenever it can be done, thus to enlist the entire community, in all its groups, in the work of village improvement. More work is accomplished with less friction, because all the people work together; and the social effects of such sympathetic co-operation are often quite as valuable and far-reaching as the physical effects seen in clean streets and new libraries. We may confidently recommend the local federation as the very best type of improvement organization; and if such a federation requires a



THE NEW TOWN IN WHICH INTELLIGENT PLANNING IS MOST NEEDED

larger field for its activities than that occupied for the village improvement society, why so much the better. By all means let literary entertainment, political reform, and religious awakening be combined with the campaign for a clean and orderly town and country.

All these things naturally belong together. They are fundamentally related and no one of them can progress very far without the support of the others.

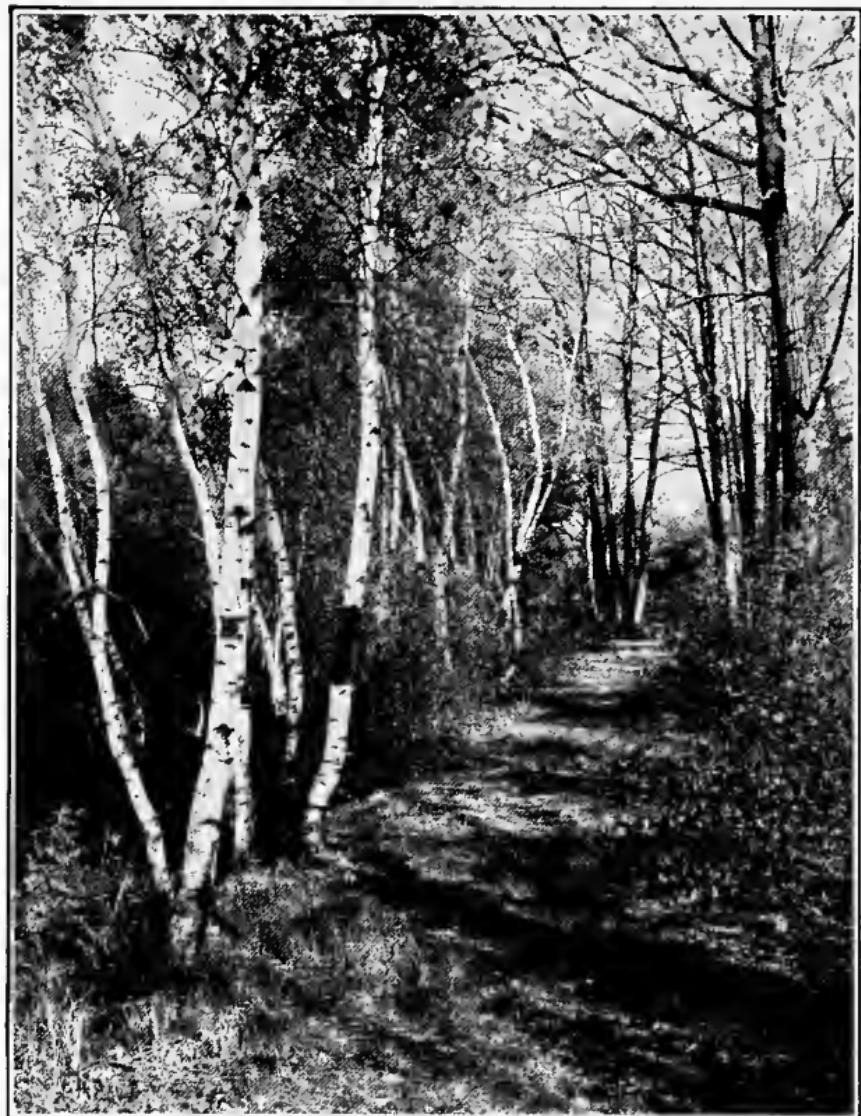
Another general principle may be easily brought to light for the guidance of improvement work, namely that the organization which directs it should be a permanent organization. Too often the citizens see only one or two detached problems, and complacently imagine that when these are solved the work will be over. When the new railroad station is built or the new park dedicated, they think there will be nothing further to do. Yet the most important element in community improvement is its continuity. Nothing worth while can be brought to pass in a day. It requires years

RURAL IMPROVEMENT

of sustained effort to do things on a neighborhood scale. The bedrock idea of civic improvement is to foresee the needs of the community for a long period in the future and to make wise provision for those needs. The very name we use signifies that we have a continuing work, for improvement is possible forever. Village improvement is better than social reform because improvement has no end, while reforms are soon over.

EXPERT ASSISTANCE

At this point it is highly important to urge the need of expert assistance in village improvement and all affairs of similar character. It may be laid down as a rule, subject only to the rarest exceptions, that the improvements in any town or neighborhood should be carried forward in accordance with some well-settled plan, and that this plan should be the work of an expert. City planning is now recognized as a profession in itself, a branch of landscape architecture. The public is coming to recognize also that



WILD RAMBLE IN THE NATIVE WOODS—BETTER THAN A
MANUFACTURED PARK

the planning of small cities, of villages and of rural communities, is just as much a matter of professional experience, as it is equally a matter of public importance. Each community, therefore, at the very moment when it first becomes aroused to the need of its own betterment, should consult some expert in such matters. Usually the first and best expert to be called is the landscape architect with experience in civic planning. He should study the neighborhood, its topography, its industries, its history and its people carefully, and in view of all conditions should prepare a comprehensive plan for the district. This plan should be given the greatest possible publicity in the neighborhood affected. Every man, woman and child ought to see, study and understand the plan. Every detail ought to have the utmost discussion, examination, friendly criticism. If the civic planner is a fit sort of man, he will be able to profit by the views of the citizens, he will gain valuable suggestions from them, and these he will freely incorporate into his de-

RURAL IMPROVEMENT

sign. After such a design has undergone such discussion and improvement, and after disputed matters have been settled by neighborhood vote if necessary, the whole scheme ought to be adopted and generally ratified as the plan of the town, village, neighborhood or city; and thereafter the community should give itself unanimously and in good faith to carrying out the adopted plan.

Based on such a plan, there should be adopted a set program of improvements. The library is to be secured this year, the new high school two years hence, the new park in four years, a regular tree warden and park manager in five years, and so on. The community, knowing when these changes are due and what each one is expected to cost, will find the problems more than half solved. It is well known everywhere that the accomplishment of such improvements waits chiefly for the clearing up of the public mind.

Other experts beside the landscape architect may often be consulted to advantage. As a rule, all communities, and especially

small villages and country neighborhoods, suffer for want of such expert help. A transportation expert can help in solving railroad and trolley troubles. A sanitary engineer can help plan a sewer system. Should the schools appear to be giving unsatisfactory results, it will be best to secure the unprejudiced opinion of some expert educator from quite outside the neighborhood. The disregard of expert advice is widely known as a peculiar and persistent sin in our democratic form of government, and one of the soundest of civic improvements lies in the overcoming of this very sin.

FINANCIAL RESOURCES

Local improvement societies generally raise money in small amounts by various methods to carry out the schemes which they deem most valuable to their communities. The annual membership fee is sometimes the whole source of revenue. Occasionally some rich resident of the place or some well-to-do corporation will be com-

RURAL IMPROVEMENT

mitted to an annual gift of a considerable amount for improvement purposes. Often a subscription paper is circulated and citizens are invited to contribute. When the work is promoted by a woman's club or church, or grange, it is rather the usual procedure to supplement such sources of income by fairs, dances and other more or less direct means of assessing public tribute. All these methods are legitimate enough; but they are seldom adequate and are morally unsound. The only honest way is for the community to pay for its own improvements. Public works should be carried out at public charge and under the authority of public vote and subject to public inspection. The improvement society should supply only the initiative, should see that farsighted plans are made, that experts are placed in charge of works requiring professional advice, should bring a well-informed public opinion and a sound moral and esthetic sense to bear on all public questions, but should not, in general, attempt to pay the bills.

Certainly it seems mean and vicious for a town to require its women to beg from house to house to pay for clean streets. The original building of the streets is everywhere recognized as a public charge. Civic improvement consists largely in making the community realize that they are responsible for parks, playgrounds, street trees and street cleaning, as they are for road building, street lighting and police protection.

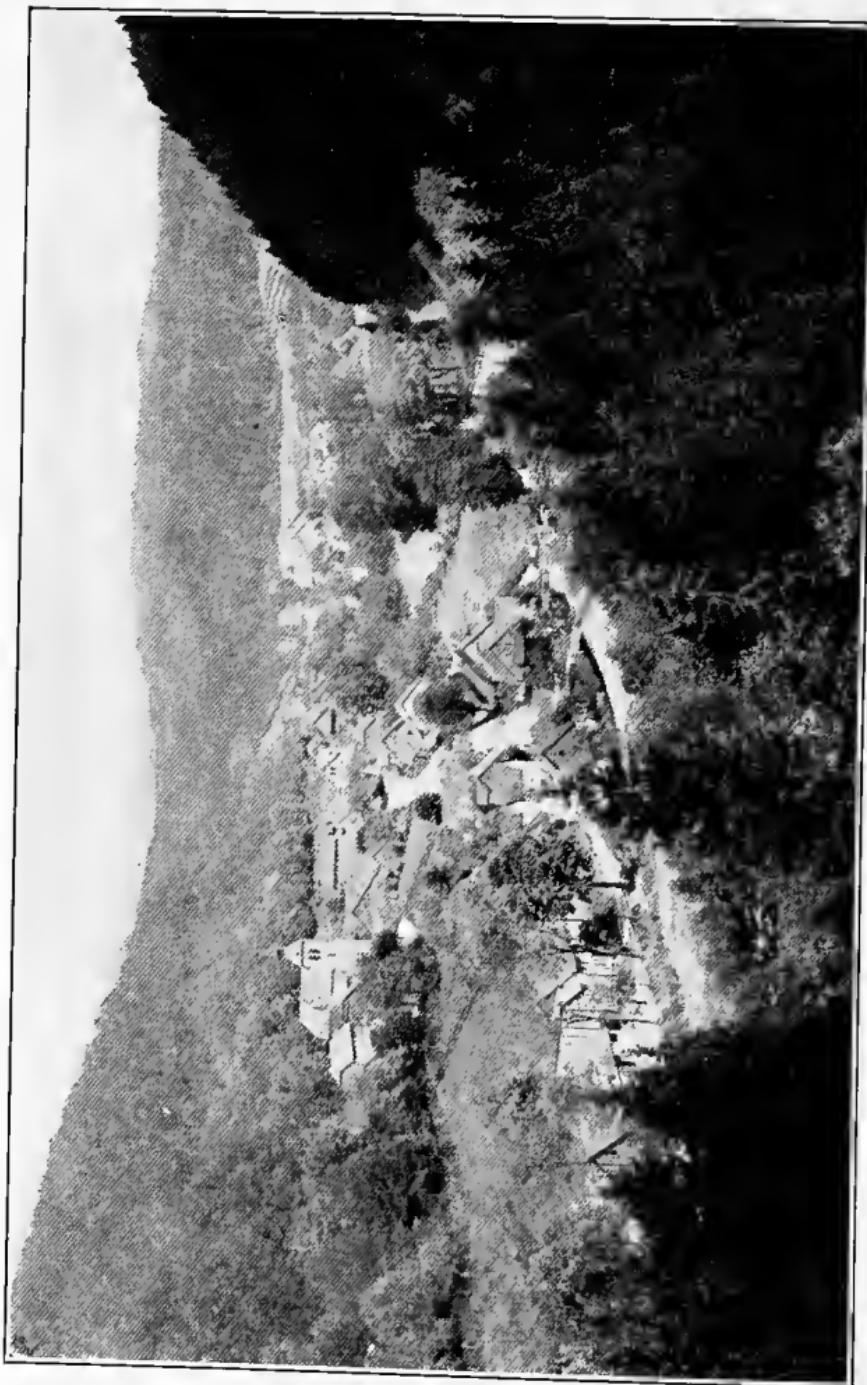
At this point it is well to recognize the important fact that a large proportion of the customary expenditures from public funds goes to projects which properly come within the interest of any village or rural improvement society. The appropriations for streets, sewers, lights and water supply are indubitably of this order, and it is just as important, therefore, for a public improvement society to see that reasonable public appropriations for streets are made and wisely expended as to raise money from private sources to be spent in street improvements. In other words, the first business of

RURAL IMPROVEMENT

an improvement organization is not to raise money on its own account, but to see that the fund raised by taxation is honestly and effectively used. The entire business of the village, the town or the county should be, in a large and important sense, a work of public improvement.

The work of an improvement society in this matter will be in seeing that suitable and relatively large appropriations are made for works of permanent improvement. Too frequently the stingy feeling prevails and the community spends money only for these things which cannot be foregone—for police to look after the drunks and for a poorhouse for the wrecks, but never a cent for the boys and the girls and the sane and the sober, never a cent for anything which makes the town clean and beautiful and pride-worthy, never a cent for anything that lasts.

Any corporate community may properly borrow money to carry out permanent improvements. Indeed, the only correct test of a proposed municipal loan is whether the money is to be spent for the enrichment of



A VILLAGE IN CENTRAL GERMANY, CLEAN AND BEAUTIFUL

the future or for current expenses. Running expenses can be met honestly only from current taxes; but permanent works, the benefits of which are to be shared by coming generations, may rightfully be charged in part to those future taxpayers. The purchase and equipment of parks and public reservations constitute the very best possible form of community investment, and offer the best possible occasion for the issue of bonds. Such bonds should usually be drawn to run 25 or 30 years, and in every case a sinking fund for their retirement should begin to accumulate on the day of their issue. Or the bonds may be issued in serial form, in which case those maturing first should fall due within ten years at latest. While posterity may be asked to pay its due proportion of such charges, posterity should not be asked to pay it all. In any case of doubt the present generation should pay more than its exact share, thus contributing something to posterity.

INDEX

	PAGE
Advertising nuisance -----	220
Agricultural improvement -----	228
Ailanthus tree -----	73
American methods-----	122
Anderson, W. L., quoted-----	1
Andre, Ed., quoted-----	135
Arbor day -----	60
Architecture -----	181
Art in America-----	2
Ash trees -----	70
Bailey, L. H., quoted-----	31
Basswood tree -----	69
Black locust -----	72
Board of trade-----	248
Bridges -----	200
Bungalow -----	184
Burnt clay roads-----	47
Butterfield, Kenyon L., quoted-----	244
California trees -----	79
Canadian farm layout-----	138
Cemeteries-----	III, 214
Central states' trees-----	76
Checkerboard road system-----	36
Church work -----	248
Civic art -----	4
Civic centers -----	83
Collections of plants-----	127
Colonial country house type-----	183
Community improvement societies-----	9
Community planning -----	160

INDEX

	PAGE
Co-ordination of community improvement-----	16
Country Life Commission, quoted-----	54
County supervision of roads-----	52
Davy, D. A. Burt, quoted-----	79
Definitions and principles-----	2
Earle, Mrs. Alice Morse, quoted-----	119
Earth roads-----	45
Economical foundation -----	227
Eliot, Chas., quoted-----	223
Elm tree -----	66
Entrances and approaches-----	19
Expert assistance -----	253
Farm architecture -----	181
Farm buildings and arrangement-----	145
Farm buildings and location ⁴ -----	142
Farm center -----	142
Farm deeds and surveys-----	141
Farm hauling, cost of-----	34
Farm industries -----	230
Farm planning -----	137
Farm power -----	194
Farm subdivision -----	144
Farmhouse, model -----	185
Farmhouse types -----	182
Federation of societies-----	250
Financial resources -----	255
Front yard vs. back yard-----	122
Garden styles -----	129
Grange hall -----	92
Grange work -----	248
Gravel roads -----	46
Gridiron street system-----	162
Gulf states' trees-----	76
Hackberry -----	73
Hardy plants -----	131

INDEX

	PAGE
Hartlib, Samuel, quoted-----	136
Heating systems -----	191
Home garden -----	120
Honey locust -----	73
Horse chestnut -----	70
Improvement of existing towns-----	175
Improvement plan -----	236
Improvement problems -----	5
Improvement program -----	237
Improvement programs -----	224
Incidental problems -----	205
Leadership -----	224
Lewis, Prof. C. I., quoted-----	78
Lighting systems -----	190
Litchfield, Connecticut, common-----	84
Local parks -----	106
Macadam roads -----	49
Main roads -----	38
Maintenance-----	132, 239
Maple tree -----	67
Means of access-----	19
Mielke, Robert, quoted-----	57, 180
Modern conveniences in farmhouses-----	189
Muir, John, quoted-----	102
National parks -----	103
National roads -----	53
Native plants -----	131
Natural vs. formal styles-----	129
New England farm buildings-----	146
New England trees-----	75
Nolen, John, quoted-----	159
Nuisances -----	219
Oak trees-----	71
Oiling the roads-----	48
Organization and management-----	245

INDEX

	PAGE
Ornamental treatment of farm grounds-----	149
Parkinson, John, quoted-----	118
Park treatment of farm grounds-----	151
Planning home gardens-----	122
Planting home gardens-----	130
Playgrounds -----	115, 211
Pole and wire nuisance, The-----	220
Poplar trees -----	72
Postoffice location -----	86
Prairie states' trees-----	75
Principles of road location-----	38
Programs of improvement-----	224
Public buildings -----	196
Public centers -----	87
Public grounds -----	103
Public monuments and memorials-----	200
Public roads in the United States-----	32
Quadrangular building arrangement-----	147
Radiating road system-----	41
Railroad stations -----	21
Relocation of roads-----	43
Rest rooms -----	217
Road and street planning-----	36
Road construction -----	44
Road management -----	51
Road taxes -----	50
Roads and streets-----	32
Roadside trees -----	58
Robinson, Chas. M., quoted-----	1
Rocky Mountain states' trees-----	75
Roman farm layout-----	138
Rural architecture -----	181
Rural community center-----	99
Scenic roadways -----	109
School gardens -----	212

INDEX

	PAGE
School grounds-----	109, 205
Sewage disposal -----	193
Simplicity -----	126
Sitte, Camillo, quoted-----	18
Social improvement -----	231
Social survey -----	232
State improvement campaigns-----	11
State parks -----	105
State-wide improvement work-----	10
Stone-clay roads -----	47
Stone roads -----	49
Street intersections -----	168
Survey-----	225, 235
Sycamore tree -----	69
Temporary decorations -----	202
Time element -----	14
Town common -----	94
Town commons -----	113
Trees, best varieties of-----	66
Trees, care of-----	62
Trees for special locations-----	74
Trees for street planting-----	58
Tree wardens -----	63
Trolley stations-----	26, 215
Ventilation -----	189
Village architecture -----	195
Village church -----	88
Village home -----	195
Village home garden-----	120
Village improvement society-----	245
Village improvement societies-----	9
Waring, George E., Jr., quoted-----	204
Willis, K. P., quoted-----	82
Women's clubs -----	246
Zueblin, Chas., quoted-----	1

